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necrosis factor receptor type 1 (TWRI) RNA. These antisense compounds can be used in a method of inhibiting the expression of TNFR1 human cells or tissues. The antisense compounds specifically bybridize with one or more nucleic acids encoding TNFR1 modulating the function of nucleic acid molecules encoding TNFR1, ultimately modulating the amount of TNFR1 produced. The antisense compounds and method are useful as research reagents and diagnostics, and in the treatment and prophylaxis of infection, inflammation or tuniour formation. Sequences AAZ48482-565 represent antisense oligos used for inhibition of the human TNFR1 mRNA
                                                                                                                                                                            human cells
                                                                                                                                                                                                                     nucleic acid
                                                                                                                           The invention provides antisense compounds targeted to human tumour necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds can be used in a method of inhibiting the expression of TNFR1 human celor tissues. The antisense compounds specifically hybridize with one or more nucleic acids encoding TNFR1 modulating the function of nucleic ac molecules encoding TNFR1, ultimately modulating the amount of TNFR1 produced. The antisense compounds and method are useful as research reagents and diagnostics, and in the treatment and prophylaxis of infection, inflammation or tumour formation. Sequences AAZ48482-565 represent antisense oligos used for inhibition of the human TNFR1 mRNA
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                            Antisense inhibition of tumor necrosis factor type 1 expression for diagnosis, treatment and prevention of disease, particularly tumors.
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                                                                                          Example 10; Col 25; 34pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention provides antisense compounds targeted to human tumour necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds can be used in a method of inhibiting the expression of TNFR1 human cells or issues. The antisense compounds specifically hybridize with one or more nucleic acids encoding TNFR1 modulating the function of nucleic acid produced. The antisense compounds and method are useful as research produced. The antisense compounds and method are useful as research reagents and diagnostics, and in the treatment and prophylaxis of infection, inflammation or tumour formation. Sequences AAZ48482-565 represent antisense oligos used for inhibition of the human TNFR1 mRNA
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inflammation; tumour formation; TNFR1; anticancer; ss.
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Matches 18; Conserv
Synthetic.
Homo sapiens.
                                                                                                                                            26-JUN-1998;
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\Z48528/c
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RESULT 4
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The invention provides antisense compounds targeted to human tumour necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds can be used in a method of inhibiting the expression of TNFR1 human cells or tissues. The antisense compounds specifically hybridize with one or more nucleic acids encoding TNFR1 modulating the function of nucleic acid molecules encoding TNFR1, ultimately modulating the amount of TNFR1 produced. The antisense compounds and method are useful as research reagents and diagnostics, and in the treatment and prophylaxis of infection, inflammation or tumour formation. Sequences AAZ48482-565 represent antisense oligos used for inhibition of the human TNFR1 mRNA
                                                                                                            Tumour necrosis factor receptor type 1; TNFR1; antisense; infection; inflammation; tumour formation; TNFR1; anticancer; ss.
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                                                                      Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18924.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 10; Col 25; 34pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 929 TATCCTTCTTCATTG 946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                           98US-00106038.
                                                                                                                                                                                                                                                                                                                                                  98US-00106038.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ48530 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                      31-MAR-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                            Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-105333/09.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                           26-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                  26-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US6007995-A.
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                                                                                                                                                                                                                               JS6007995-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18;
                                                                                                                                                                                                                                                                     28-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                              Baker BF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAZ48530;
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AAZ48531;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 6
AAZ48530/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention provides antisense compounds targeted to human tumour necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds can be used in a method of inhibiting the expression of TNFR1 human cells or tissues. The antisense compounds specifically hybridize with one or more nucleic acids encoding TNFR1 modulating the function of nucleic acid molecules encoding TNFR1, ultimately modulating the amount of TNFR1 produced. The antisense compounds and method are useful as research reagents and diagnostics, and in the treatment and prophylaxis of infection, inflammation or tumour formation. Sequences AAZ48482-565 represent antisense oligos used for inhibition of the human TNFR1 mRNA
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                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                          Tumour necrosis factor receptor type 1; TNFR1; antisense; infection; inflammation; tumour formation; TNFR1; anticancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antisense inhibition of tumor necrosis factor type 1 expression for diagnosis, treatment and prevention of disease, particularly tumors.
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                                                        DB 1; Length 18; 58;
                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                        mRNA inhibiting antisense oligo ISIS# 18922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;
                    Sequence 18 BP; 9 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                              0; Mismatches
                                                                                Pred. No.
                                                          24.7%; Score 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 10; Col 25; 34pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     911 TCTTTGGTCTTTGCCTTT 928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         larity 100.0%; P. Conservative 0;
                                                                                                                                      935 TCCTCTTCATTGGTTTAA 952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ48531 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                         AAZ48529 standard; DNA; 18 BP
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                                                                            100.08;
                                                                                                                                                                   18 ICCICITCALIGELIAA
                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-105333/09.
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nes 18; Conser
                                                                            Best Local Similarity
Matches 18; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                          Human TNFR1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18
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                                                            Query Match
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26-JUN-1998; 26-JUN-1998;

Baker BF,

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Example 10; Page 45; 121pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           921 TIGCCTTTIATCCCTCCT 938
                                                                                                                                                                                                                                                                                       to the TNFR1 of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-OCT-2001; 2001WO-US051224.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18 TIGCCTITIATCCCICCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABT05029 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 100.
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Baker BF, Cowsert LM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-JUN-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABT05029;
                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 8
ABT05029/c
     8888888888888888888
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·;
                                                                                                                                                                                                                                                                                                                                                                      The invention provides antisense compounds targeted to human tumour necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds can be used in a method of inhibiting the expression of TNFR1 human cells or tissues. The antisense compounds specifically hybridize with one or more nucleic acids encoding TNFR1 modulating the function of nucleic acid molecules encoding TNFR1 ultimately modulating the amount of TNFR1 produced. The antisense compounds and method are useful as research reagents and diagnostics, and in the treatment and prophylaxis of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            infection, inflammation or tumour formation. Sequences AA248482-565 represent antisense oligos used for inhibition of the human INFRI mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                  Antisense inhibition of tumor necrosis factor type 1 expression for diagnosis, treatment and prevention of disease, particularly tumors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TNFR1 expression modulation related antisense oligo SEQ ID No 56.
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18 BP, 9 A, 1 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zhang H, Dean NM;
                                                                                                                                                                                                                                                                                                                            Example 10; Col 25; 34pp; English
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                                                  98US-00106038.
98US-00106038.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABT05026 standard; DNA; 18
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                                                                                                 (ISIS-) ISIS PHARM INC.
                                                                                                                                                      Cowsert LM;
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es 18; Conserv
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Example 10; Page 45; 121pp; English.

Homo sapiens,

20-JUN-2002.

Baker BF,

11-0CT-2002

ABT05026;

T05026/c

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Query Match Best Local S

Matches

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The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of traking an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disease (such as hepatitis, or liver the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polymucleotide sequence represents a human oligonucleotide relating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the artisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.
                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TNFR1 expression modulation related antisense oligo SEQ ID
                                                                                                                                                                                                                                                                                                                                                         Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                           Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                         DB 1;
58;
                                                                                                                                                                                                                                                                                                                                                    24.7%; Score 18; DB 100.0%; Pred. No. 58; ive 0; Mismatches
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Novel antisense compound targeted to nucleic acid molecule encoding tumor
necrosis factor receptor 1 (TNPR1), useful for treating humans having
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
                                                                                                                                       Antisense compound; tumour necrosis factor receptor 1; liver disease; INFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
                                                                                                       INFR1 expression modulation related antisense oligo SEQ ID No 121.
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ABT05091 standard; DNA; 18 BP.
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                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                   Cowsert LM,
                                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC
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                                                                                                                                                                                                                                                    WO200248168-A1.
                                                                                                                                                                                                                  Homo sapiens
                                                                       11-OCT-2002
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                                                                                                                                                                                 human; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Baker BF,
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                                   ABT05091;
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ABT05098/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TMFR1), where the antisense compound inhibitis expression of TMFR1. The antisense compound is useful for inhibiting the expression of TMFR1 in cells or tissues. The antisense compound is also useful for retating an animal (preferably human) having a disease or condition associated with TMFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating
                                                                                                                                                                                                                                                                                                                                                                               Antisense compound; tumour necrosis factor receptor 1; liver disease; INFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                               INFR1 expression modulation related antisense oligo SEQ ID No 133.
                                                                         ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24.7%; Score 18; DB 1; Length 18; 100.0%; Pred. No. 58; o; Indels cive 0; Mismatches 0; Indels
                                   DB 1; Length 18; 58;
                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
   Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
                                   24.7%; Score 18; DB 100.0%; Pred. No. 58; ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dean NM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 18; Page 56; 121pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zhang H,
                                                                                                           952 ATGIATCGCTACCAACGG 969
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                                                                                                                                             Argrarcgcraccaacge 1
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                                                                                                                                                                                                                                     ABT05103 standard; DNA; 18
                                                                                                                                                                                                                                                                                                             (first entry)
                                                                         18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Baker BF, Cowsert LM,
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Best Local Similarity
                                       Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                      human; ds.
                                                                                                                                               18
                                                                                                                                                                                                                                                                           ABT05103;
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                                                                           Matches
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Dean NM;

Zhang H,

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                                                                                     Gaps
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                                                                                     .
0
                                                      Score 18; DB 1; Length 18; Pred. No. 58; 0; Mismatches 0; Indels
                          Sequence 18 BP; 10 A; 4 C; 3 G; 1 T; 0 U; 0 Other;
                                                                                  .,
                                                                                                                  903 GGTCATTTTCTTTGGTCT 920
to the TNFR1 of the invention
                                                        24.7%; {
100.0%;
                                                                                                                                               18 GGrCArrircrirgGrCr 1
                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                         ABT05098 standard; DNA; 18
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                                                         Query Match 24.7
Best Local Similarity 100.
Matches 18; Conservative
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                                                                                                                                                                                                                                                                                                                                                                             human; ds
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Homo sapiens

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Gaps

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952 ATGTATCGCTACCAACGG 969

18;

Matches

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Argrarcecraceacee 1

18

ABT05091/c

RESULT 10

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Novel antisense compound targeted to nucleic acid molecule encoding tumor
                                                                                                                                                                         The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disease (such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polymucleotide sequence represents a human oligonucleotide relating
                                                                    necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TNFR1 expression modulation related antisense oligo SEQ ID No 130.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24.7%; Score 18; DB 1; Length 18; 100.0%; Pred. No. 58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 100.0%; Pred. No. 58; les 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dean NM;
                                                                                                                                   Example 18; Page 56; 121pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 909 TITCTITGGICTITGCCT 926
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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WPI; 2002-583481/62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-583481/62.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABT05100;
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Matches
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                                                                                                                                                                                                                                                                                                                             Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    length targeted to nucleic administration to the control of the control of the control of an intercoller and the compound in thibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1. e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention relates to an antisense compound 8 to 30 nucleotides in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.
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                                                                                                                                                                                                                                                Dean NM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ch 24.7%; Score 18; 1 Similarity 100.0%; Pred. No. 18; Conservative 0; Mismatch
                                                                                                                                                                                                                                                                                                                                                                                                                    Example 18; Page 56; 121pp; English.
                                                                                                                                                                                                                                           Zhang H,
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                                                                                                     22-OCT-2001; 2001WO-US051224.
                                                                                                                                               24-OCT-2000; 2000US-00695451
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) ABT05093 standard; DNA; 18
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                                                                                                                                                                                                                                                                                   WPI; 2002-583481/62.
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Best Local Similarity
Matches 18; Conserv
              WO200248168-A1
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                                                          20-JUN-2002
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Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
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treating an animal (preferably human) having a disease or condition associated with TNFRI. e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFRI. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polymucleotide sequence represents a human oligonucleotide relating to the TNFRI of the invention
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                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                 ;
                                                                                                                                                                                           24.7%; Score 18; DB 1; Length 18; 100.0%; Pred. No. 58;
                                                                                                                                                                                                                                 0; Indels
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                                                                                                                                                       Seguence 18 BP; 8 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                   0; Mismatches
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                                                                                                                                                                                                                 Pred. No.
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                                                                                                                                                                                                                                                                         931 TCCCTCCTCTTCATTGGT 948
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Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
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                                                                                                                                                                                                                                    Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dean NM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 10; Page 45; 121pp; English.
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936
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                              18 crriccrrrrarccirc 1
                                                                                                            ABT05028 standard; DNA; 18 BP.
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919 CTTTGCCTTTTATCCCTC
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Les 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cowsert LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-583481/62.
                                                                                                                                                                                                                                                                                                                                         WO200248168-A1
                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                          11-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                       20-JUN-2002.
                                                                                                                                                                                                                                                                         human; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Baker BF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABT05094;
                                                                                                                                              ABT05028;
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ID ABT05
XX
AC ABT05
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                                                                                RESULT 15
                                                                                                ABT05028/
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Gaps

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Query Match

24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels

Dean NM;

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Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
                                                                                                                                                                                                                                                                                                                                              The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibitis expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treatings an animal (preferably human) having a disease or condition associated with TNFR1. e.g. a liver disease (such as hepatitis, or liver injury) or a hyperpoliferative disorder such as cancer, by inhibiting the expression of TNRR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TNFR1 expression modulation related antisense oligo SEQ ID No 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antisense compound, tumour necrosis factor receptor 1; liver INFR1; hepatitis; liver injury; hyperproliferative disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 18; DB 1; Length 18;
Pred. No. 58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 18 BP; 8 A; 1 C; 8 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                        Example 18; Page 56; 121pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24.7%; Scc...
100.0%; Pred
0, N
                                                                                                                                 Zhang H,
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22-OCT-2001; 2001WO-US051224.
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                                         24-OCT-2000; 2000US-00695451,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-OCT-2001; 2001WO-US051224.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    923 GCCTTTTATCCCTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18 GCCTTTTATCCCTCCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        024/c
ABT05024 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
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                                                                                  ISIS PHARM INC
                                                                                                                               Cowsert LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ĽW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC.
                                                                                                                                                                        WPI; 2002-583481/62
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200248168-A1
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                                                                                                                               Baker BF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                human; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABT05024;
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Best Local
                                                                                    (ISIS-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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  셤
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition treating an animal (preferably human) having a disease or condition injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polypucleotide sequence represents a human oligonucleotide relating
                                                  Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antisense compound; tumour necrosis factor receptor 1; liver disease; INFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
           TNFR1 expression modulation related antisense oligo SEQ ID No 124.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TNFR1 expression modulation related antisense oligo SEQ ID No 127.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24.7%; Score 18; DB 1; Length 18; 100.0%; Pred. No. 58; 0; Indels ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 18 BP; 10 A; 3 C; 4 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                              Dean NM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 18; Page 56; 121pp; English
                                                                                                                                                                                                                                                                                                                                                                                                          Zhang H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 915 TGGTCTTTGCCTTTTATC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the TNFR1 of the invention
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                                                                                                                                                                                                                                                                                                                   24-OCT-2000; 2000US-00695451.
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                                                                                                                                                                                                                                                                                                                                                                                                       Baker BF, Cowsert LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-583481/62.
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                                                                                                                                                                                   WO200248168-A1.
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                                                                                                                                          Homo sapiens.
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Query Match

Matches

T05097/c

0

Gaps

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Indels

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Mismatches

Dean NM;

This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention

Sequence 18 BP; 8 A; 1 C; 7 G; 2 T; 0 U; 0 Other;

core 18; DB 1; Length 18; Pred. No. 58;

Similarity

Query Match Best Local

S S X S

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Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
                                                                                                                                          The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TMPR1), where the antisense compound inhibits expression of TMPR1. The antisense compound is useful for inhibiting the expression of treating an animal (preferably human) having a disease or condition associated with TMPR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TMPR1. The antisense compound is useful for the expression of TMPR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polymucleotide sequence represents a human oligonucleotide relating
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                                                Example 10; Page 45; 121pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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Best Local Simi
Matches 18;
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disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
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                                                                                                                                                                                                                                                                                                              use compound; tumour necrosis factor receptor 1; liver disease; hepatitis; liver injury; hyperproliferative disorder; cancer;
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                                   Gaps
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                                 Indels
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24.7%; Score 18; DB 100.0%; Pred. No. 58; ive 0; Mismatches
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                                                                  929 TATCCTCTCTTCATTG 946
                                                                                             Н
                                                                                                                                                                                ABT05101 standard; DNA; 18 BP
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                                                                                                  TATCCCTCCTCTTCATTG
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                                   18; Conservative
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                                                                                                                                                                                                                                                                                                               Antisense compound;
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                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
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The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNRR1), where the antisense compound inhibitis expression of TNRR1. The antisense compound is useful for inhibiting the expression of TNRR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNRR1. e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNRR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits.

Example 10; Page 45; 121pp; English.

Dean NM;

Zhang H,

human;

SSULT 21 3T05102/c

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Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNPR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibities expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for disquestics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 10; Page 45; 121pp; English.
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Matches 18; Conservative
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                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC
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                                            Homo sapiens,
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  human; ds.
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ABT05090/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TMFR1), where the antisense compound inhibities expression of TMFR1. The antisense compound is useful for inhibiting the expression of TMFR1 in cells or tissues. The antisense compound is also useful for reating an animal (preferably human) having a disease or condition associated with TMFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TMFR1. The antisense compound is useful for disappostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TMFR1 of the invention
                                                                                                                                                                                                                                          Antisense compound, tumour necrosis factor receptor 1, liver disease;
INFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
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                                                          ABT05102 standard; DNA; 18 BP.
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) ABT05025 standard; DNA; 18 BP.
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Best Local Similarity 100.
Matches 18; Conservative
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Gaps

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Dean NM;

Zhang H,

Cowsert LM,

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22-OCT-2001; 2001WO-US051224
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                                                                       Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
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Pred. No. 58;
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100.0%; Pred. No. cc.
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WPI; 2002-583481/62.
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Best Local Similarity
Matches 18; Conserv
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ABT05099 standard; DNA; 18 ABT05099;

Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; INFR1 expression modulation related antisense oligo SEQ ID No 129. (first entry) Homo sapiens. 11-0CT-2002 numan; ds.

WO200248168-A1. 20-JUN-2002 24-OCT-2000; 2000US-00695451

(ISIS-) ISIS PHARM INC.

Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer. Dean NM; Zhang H, Cowsert LM, WPI; 2002-583481/62. BF,

The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of Treating an animal (preferably human) having a disease or condition associated with TNFR1. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNRR1. The antisense compound is useful for disponstics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention

Example 18; Page 56; 121pp; English.

Sequence 18 BP; 12 A; 2 C; 3 G; 1 T; 0 U; 0 Other;

Example 18; Page 56; 121pp; English

The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor

0; Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer. associated with TNFRI, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFRI. The antisense compound is useful for disgnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFRI of the invention receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; Gaps INFR1 expression modulation related antisense oligo SEQ ID No 122. .; 0 24.7%; Score 18; DB 1; Length 18; 100.0%; Pred. No. 58; o; Indels ive 0; Mismatches 0; Indels Sequence 18 BP; 9 A; 0 C; 7 G; 2 T; 0 U; 0 Other; Dean NM; Zhang H, 927 TTTATCCCTCCTCTTCAT 944 BP Н 22-OCT-2001; 2001WO-US051224. 24-OCT-2000; 2000US-00695451 18 ritarccircritar ABT05092 standard; DNA; 18 (first entry) 18; Conservative (ISIS-) ISIS PHARM INC Cowsert LM, WPI; 2002-583481/62. WO200248168-A1. Homo sapiens. 11-OCT-2002 20-JUN-2002. Baker BF, ABT05092; Query Match Best Local & human; Matches ABT05092/ 88888888888 ò q

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Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
                                                                    expression modulation related antisense oligo SEQ ID No 134.
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                                                                                                                                     human; ds.
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     ABT05104;
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNRRI), where the antisense compound inhibitis expression of TNFRI. The antisense compound is useful for inhibiting the expression of TNFRI in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFRI, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFRI. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating
                                   Gaps
                                                                                                                                                                                                                                                                                                           Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.
                                                                                                                                                                                                                                                                              TNFR1 expression modulation related antisense oligo SEQ ID No 125.
                                   ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 18; DB 1; Length 18;
Pred. No. 58;
0; Mismatches 0; Indels
   Length 18;
                                  Indels
                                  ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP; 9 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
     1;
DB 1
58;
                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dean NM
24.7%; Score 18; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 18; Page 56; 121pp; English.
   24.,,
100.0%; Fre
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Pre
                                                                 922
                                                                                  TCATTTCTTTGGTCTT 1
                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Zhang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-OCT-2001; 2001WO-US051224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-OCT-2000; 2000US-00695451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24.78;
                                                                 905 TCATITITCTTIGGICTIT
                                                                                                                                              3SULT 26
3T05095/c
) ABT05095 standard; DNA; 18
                                                                                                                                                                                                                                               (first entry)
                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cowsert LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-583481/62.
Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                              WO200248168-A1
                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                               11-0CT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                             20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Baker BF,
                                                                                               18
                                                                                                                                                                                                                ABT05095;
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Dean NM;

Zhang H,

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Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
                                                                                                                                                        The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibitis expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1. a liver disease (such as hepatitis, or liver injury) or a hyperpoliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for disquostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mouse; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Protein refolding, growth hormone supergene family, human, m
therapeutic half-life, PCR primer, anti-angiogenesis factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1; Length 18; 58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 18 BP; 4 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24.7%; Scor.
100.0%; Pred. No. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human protein refolding PCR primer #36.
                                                                                                         Example 18; Page 56; 121pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       954 GTATCGCTACCAACGGTG 971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTATCGCTACCAACGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABK16809 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 100.
es 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200187925-A2
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Gaps

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917 GICTITIGCCTTTTATCCC 934

18

Conservative

BP.

3T05104/c) ABT05104 standard; DNA; 18

SSULT 27

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WO200248168-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Baker BF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABT05171;
                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                             The invention relates to a host cell, made to express an insoluble or aggregated protein having free cysteines residues. The cell is then lysed by chemical, enzymatic or physical agents and solubilised by exposing it to a denaturing agent, a reducing agent and a cysteine blocking agent, and is refolded into a biologically active form by reducing the concentrations of denaturing and reducing agents. The protein may belong to the growth hormone supergene family or may be an anti-angiogenesis factor. The method is useful for preparing a refolded, soluble form of an insoluble or aggregated protein. The proteins of the invention can act as delivery vehicles for antached or for directing delivery vehicles for eattached or for directing delivery of a specific target within the body. Sequences ABKI6774-ABKI6852 represent PCR primers used in synthesis of the proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fungus, yeast, tetracyclin, promoter, GRACE strain, biosynthesis,
signal transduction; DNA replication, cell division; growth,
proliferation; Candida albicans; fungicide, antifungal, PCR, primer; ss.
                                                                                                                                   Making and refolding insoluble or aggregated proteins having free cysteine by exposing host cell expressing protein to cysteine blocking agent, and exposing to cysteine reactive group to increase their
                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                          4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Candida albicans GRACE strain PCR primer SEQ ID NO 4182.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ohlsen KL;
                                                                                                                                                                                                                                                                                                                                                                             Sequence 24 BP; 4 A; 8 C; 2 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                 Score 17.6; DB; Pred. No. 84; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bussey H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 944 TIGGITTAATGIATCGCTACCAAC 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TICGITITCICIAICGCIACCAAC 24
                                                                                                                                                                                          Example 9; Page 39; 110pp; English.
                                                                                        Doherty DH;
                                                                (BOLD-) BOLDER BIOTECHNOLOGY INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Roemer T, Jiang B, Boone C,
                                                                                                                                                                                                                                                                                                                                                                                                    24.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-DEC-2000; 2000US-0259128P.
20-FEB-2001; 2001US-00792024.
22-AUG-2001; 2001US-0314050P.
                    16-MAY-2001; 2001WO-US016088.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-DEC-2001; 2001WO-US049486.
                                          16-MAY-2000; 2000US-0204617P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABZ30031 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 83.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ELIT-) ELITRA PHARM INC.
                                                                                        Cox GN,
                                                                                                             WPI; 2002-089843/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Candida albicans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200253728-A2.
                                                                                       Rosendahl MS,
                                                                                                                                                          agent, and expefectiveness.
22-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-JUL-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABZ30031
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The intention features of a gene are modified, comprising modifying one allele by insertion or replacement by a cassette having modifying one allele by insertion or replacement by a cassette having an expressible marker and modifying other allele by recombination, of a promoter replacement fragment with a heterologous promoter. (An) is useful for constructing a strain of diploid fungal clis in which both alleles of a gene are modified. The diploid fungal cells in which both alleles modified are useful for identifying a gene that contributes to the virulence and/or pathogenicity of a fungus, a gene that contributes to the virulence and/or pathogenicity of a fungus a gene that contributes to the virulence of a diploid fungus to an antifungal agent, an antifungal agent that inhibits the growth of a diploid fungus and for identifying a therapeutic agent for treatment of a mammalian disease. (M1) is useful for identifying a compound which modulates the activity of a gene product, preferably enzymatic activity, carbon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                               for therapeutic intervention, by inactivating in the strain one allele of a gene and placing other allele of the gene under conditional expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    this patent is not represented in the printed specification but is based on sequence information supplied to Derwent by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           compound catabolism, biosynthetic, transporter, transcriptional, translational, signal transduction, DNA replication and cell division activity. The method is useful for identifying a compound having the ability to inhibit growth or proliferation of C. albicans cells and for treating infection by C. albicans. The present sequence is that of a PCR primer used in the method of the invention. Note: The sequence data for
                                                                                      Constructing strains for identifying gene products as effective targets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; mouse; murine; ds.
                                                                                                                                                                                                                                                                                                                                                      The invention relates to constructing (M1) a strain of diploid fungal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·,
                                                                                                                                                                                                                                                               Claim 36; SEQ ID NO 4182; 167pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23.3%; Score 17; DB 1; Length 25; 80.0%; Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 25 BP; 0 A; 9 C; 2 G; 14 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dean NM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               909 TITCTTIGGICTTIGCCTTITATCC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITCITCIGICITICCCTIGICICC 25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-OCT-2000; 2000US-00695451
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cowsert LM,
WPI; 2002-566694/60
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Gaps

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Length 22; 2; Indels

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Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; MSGF; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor;
ancestry between 2 or more plants, to monitor the genetic contribution an anoestral plant, to trace the progeny of proprietary plants, in certification of a hybrid plant or to identify the progeny of a backcrossed plant with an ancestral plant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mouse flt-1 VEGF receptor hammerhead ribozyme substrate
                                                                                                  Sequence 22 BP; 2 A; 3 C; 7 G; 10 T; 0 U; 0 Other;
                                                                                                                                      Score 15.8; DB 1;
Pred. No. 1.6e+02;
                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 4; Page 156; 218pp; English.
                                                                                                                                                                                                                  902 regreatrirerry 920
                                                                                                                                                                                                                                                    4 regreatrereringerer 22
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96US-00584040.
                                                                                                                                      21.6%;
89.5%;
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                                                                                                                                                                                                                                                                                                                                                 AAX74507 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                    Query Match
Best Local Similarity 89.5-
The 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   foetal liver kinase 1; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1997-259017/23.
                                                                                                                                                                                                                                                                                                                                                                                                                               28-JUL-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-OCT-1996;
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                                                                                                                                                                                                                                                                                                                                                                                         AAX74507;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus sp.
                                                                                                                                                                                                                                                                                                                 RESULT 32
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                                    Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
                                                                                                                                                The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TWRR1), where the antisense compound inhibitis expression of TWRR1. The antisense compound is useful for inhibiting the expression of treating an animal (preferably human) having a disease or condition associated with TWRN. e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TWRR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polymucleotide sequence represents a mouse oligonucleotide relating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Polymorphic marker, allele-specific, probe; amplification, PCR primer, hybridisation, plant; hybrid certification; genetic contribution; progeny, back-cross, hybrid; ancestry, corn, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Brassica species allele-specific oligonucleotide probes and primers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                             21.6%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 1.5e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Murigneux A;
                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 9 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zea mays genome forward PCR primer #122.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sapolsky RJ,
                                                                                                                  Example 21; Page 61; 121pp; English,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         914 TIGGICITIGCCTITIAIC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19 TAGGTCTTTGCCTTCTATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                                                                                                                                                                                                                                       TNFR1 of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96US-0032069P.
97US-00813507.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97WO-US021782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAV51522 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                useful for plant breeding
                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 21.6
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Landry BS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
    WPI; 2002-583481/62
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                                                                                                                         stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        þe
                                                                                                                                                                                                                                                                                                                                                                        The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mENA encoding 1 or more receptors of vascular endothelial growth factor (WEGF). A patiant (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (WDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rhematoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX$\tilde{7}755 to AAX$\tilde{7}552 represent specific examples
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of nucleic acid molecules from the present invention
Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 7 A; 2 C; 7 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
21.1%; Score 15.4; DB 1;
Best Local Similarity 94.1%; Pred. No. 1.6e+02;
Matches 16; Conservative 0; Mismatches 1;
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AAV51401-V51704 are forward PCR primers used to amplify fragments of the Zea mays genome in order to detect polymorphic markers. Such markers can be used in the construction of allele-specific primers and probes for amplification or hybridisation, e.g. to determine common or disparate

Example 1; Page 52; 65pp; English.

WO9824796-A1

Synthetic.

02-FEB-1999

AAV51522;

SULT 31 V51522 01-DEC-1997; 02-DEC-1996; 07-MAR-1997;

Lemieux B,

11-JUN-1998

937

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schultz1-899.rng

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The present invention relates to nucleic acid molecules which modulate
the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
and enzymatic nucleic acids such as hammerhead ribozymes. DNAzymes,
inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
are nucleic acid decoy molecules and aptamers that bind to HBV reverse
transcriptase and/or HBV reverse transcriptase primer sequences, as well
as oligonuclectides that specifically bind the Enhancer I region of HBV
CNA. The nucleic acids may be used to modulate the expression of HBV
compounds and/or potential therapies disclosed is a method for screening
compounds and/or potential therapies disclosed against HBV, and compounds
that modulate the expression and/or replication of HCV. The compounds and
methods of the invention are useful for the treatment of degenerative and
disease states related to HBV and HCV infection, replication and gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                            Nucleic acid molecule, Hepatitis C virus, HCV, Hepatitis B virus, HBV, RNA stability, RNA expression, RNA synthesis, antisense, enzymatic nucleic acid, hammerhead ribozyme; DNAzyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule, aptamer, HBV reverse transcriptase; Enhancer I region; viral replication; degemerative, disease state, HBV infection; HCV infection; cirrhosis, liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide, antiinflammatory; substrate; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mcswiggen J, Morrissey D,
                                                                                                                                                                                                   HBV hammerhead ribozyme substrate sequence #180.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-MAR-2001; 2001US-00817B79.
08-UUN-2001; 2001US-00877478.
08-UUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
            Н
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TIGCCIGITATCCCTCC
                                                                                                ACD50663 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RIBOZYME PHARM INC.
                                                                                                                                                                 (first entry)
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Roberts E;
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MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-229207/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LEE P.
DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                           Hepatitis B virus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAVCO P.
LEE P.
                                                                                                                                                                                                                                                                                                                                                                                                                         WO200281494-A1.
                                                                                                                                                                 23-SEP-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           infection.
          17
                                                                                                                                 ACD50663;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (PAVC/)
(LEEP/)
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                                                                                ACD50663
                                                              RESULT
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expression such as cirrhosis, liver failure, and hepatocellular cardinoma. The present sequence represents a substrate for one of the HBV ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences disclosed in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  detection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Monitoring anti-HBV drug resistance by genetic detection of mutations in DNA polymerase of HBV in patient's sample, involves hybridizing the polynucleic acids of the sample with a probe and detecting the hybrid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence is a primer used in a method for monitoring antihepatitis B virus (HBV) drug resistance in a patient by genetic detection of any one of mutations 1528M, M552V/I and/or V/L/M555I in HBV DNA polymerase in a biological sample from the patient. The method is useful in the field of genetic detection of anti-HBV drug resistance during HBV therapy. The method is rapid, reliable and precise
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA polymerase gene; anti-HBV drug resistance; primer; ss.
                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                    21.1%; Score 15.4; DB 1; Length 17; 29.4%; Pred. No. 1.6e+02; ive 11; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 15.4; DB 1; Length 20; Pred. No. 1.8e+02;
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                                                                                                                                                          Sequence 17 BP; 1 A; 2 C; 2 G; 0 T; 12 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HBV DNA polymerase gene PCR primer HBPr135B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Van Geyt C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; Page 12; 64pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                            17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-JUL-2000; 2000WO-EP006306.
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94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                            1 Auvuvcuvvučucuvi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF56086 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                        Similarity 29.4
5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (INNO-) INNOGENETICS NV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HBV; hepatitis B virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-138370/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mutation detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hepatitis B virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200104358-A2.
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                                                                                                                                                                                                                           Query Match
Best Local S:
Matches 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
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XA AAPS 6086/C
XX AAC AAPS 6
XX AAPS 18-A
XX HBV;
XX HBV;
XX HC20

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 34
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ь, Lee BP

ABZ24499 standard; DNA; 23

ABZ24499/ ID ABZ2

Page

WO200297065-A2.

Mus sp.

05-DEC-2002

21-MAR-2003

ABZ24499;

Johnson PA,

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The specification describes a method for producing a fused cell. The method comprises providing a porous filter; allowing a first parent cell to attach to one side of the porous filter; and causing fusion of the attach to the other side of the porous filter; and causing fusion of the cell membranes through the porous filter; and causing fusion of the cytoplasms are contiguous through the porous filter while the chromosomes of the parent cells remain separated by the porous filter. The method is useful for producing a fused cell. The method may also be used in a method for assessing reprogramming of a target cell or may be used in cell deprogramming where a plutipotent undifferentiated cell is fused with a differentiated target cell to give a deprogrammed target cell with the same genetic constituency as the original target cell. PCR primers ABZ68856-57 and probe ABZ68858 were used to amplify and detect, respectively, murine oct 3/4 cDNA from fused and parent cells, in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Producing a fused cell by providing a porous filter, allowing a first or second parent cell to attach to either side of the porous filter, respectively, and causing fusion of the cell membranes through the pores of the porous filter.
                                                                                                               Fused cell; porous filter; pluripotent cell; undifferentiated cell; OCt 3/4; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Breast cancer; malignant transformation; diagnostic; therapeutic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human breast cancer gene CH1-9al1-2 primer pch1-t7-5f.
                                                                            Forward PCR primer for murine Oct 3/4 cDNA fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 23 BP; 11 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Flasza MA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 43; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         920 ITTGCCTTTTATCCCTCCTC 939
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                                                                                                                                                                                                                                                                                                                                                                                                                03-AUG-2001; 2001GB-00018984.
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                                                                                                                                                                                                                                                                                                                                                                  02-AUG-2002; 2002WO-GB003570.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20.8%;
85.0%;
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AAV10706 standard; DNA; 19
                        28-MAY-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-JUL-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Andrews PW, Shering AF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 20.8
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  course of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INTERCYTEX LID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANDREWS P W.
SHERING A F.
FLASZA M A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-268198/26.
                                                                                                                                                                                                                                                          WO2003014337-A2.
                                                                                                                                                                                                                                                                                                              20-FEB-2003.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (SHER/)
(FLAS/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (INTE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ANDR/)
                                                                                                                                                                                                            Mus sp.
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g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to methods of producing pluripotent mammalian stem cells by reprogramming target somatic cells by introducing into the target cell a medium which includes an extract comprising soluble components of the cytoplasm and nuclear factors or reprogramming cells, where the extract is enriched for the nuclear factors. The reprogramming cell is a germ cell, e.g. an egg cell or an embryonal carcinoma (EC) cell. The target cell is a thymocyte, peripheral blood lymphocyte, epidermal cell, buccal cavity cell, cumulus cell, bone marrow stem cell, nervous system stem cell is a thymocyte, peripheral blood lymphocyte, epidermal cell, buccal cavity cell, cumulus cell, bone marrow stem cell, nervous system stem cell or adult mammal. Methods of inducing differentiation of a stem cell and of producing tissue from a stem cell are also provided. The stem cell can be used to produce neural, smooth muscle, striated muscle, cardiac muscle, bone, cartilage, liver, kidney, respiratory epithelium, haematopoietic cells, spleen, skin, stomach and intestine tissue. The tissue can be used to treat a condition or disease requiring transplantation of tissue. The stem cells can also be used to screen components with potential to treat disease. The present sequence is that of a forward PCR primer for mouse Oct 3/4, a gene characteristically expressed in pluripotent cells. Successful reprogramming of target somatic cells by treatment with EC cell extracts or Kenopus egg extracts was assessed by determining expression of such genes using a TadMan Real-time PCR method. Oct 3/4 expression was detected in mouse EC cells but not in mouse thymocytes. The primer was gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Producing mammalian stem cells from target mammalian somatic cells by introducing a medium which includes extract comprising soluble components of cytoplasm and nuclear factors of reprogramming cells, into a target cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                              Stem cell; tissue transplantation; mouse; Oct 3/4; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 23 BP; 11 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 44; 90pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          920 TITGCCTTTTATCCCTCCTC 939
                                                                                                                       Mouse Oct 3/4 forward PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 rerectrirantecerecte 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2001; 2001GB-00013118.
                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002WO-GB002691.
                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wolowacz RG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (INTB-) INTERCYTEX LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-140464/13.
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Best Local Similarity
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Gaps

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Length 23; 3; Indels

Score 15.2; DB 1; Pred. No. 2.1e+02; 0; Mismatches

screening; primer; ss.

ABZ68856;

SULT 36 3Z68856/c

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This sequence represents a probe for hepatitis b virus (HBV), used in the method of the invention for detection and/or genetic analysis of hepatitis B virus (HBV) in a sample. The method comprises: (a) optionally releasing, isolating or concentrating polynucleic acids (I) in the sample, and amplifying the relevant part of a suitable HBV gene in the sample with at least 1 suitable primer pair; (b) hybridising (I) with a combination of at least 2 nucleotide probes, which are applied to known locations on a solid support and hybridise specifically to mutant target sequences chosen from the HBV RT pol gene region, HBVA region and/or HBV genotype specific target sequences, or their complements or U for T homologues; (c) detecting the hybrids formed in step (b), and inferring the HBV genotype and/or mutants present in the beused to diagnose and/or monitor HBV mutants and/or genotypes in a
                                                                                                                                                                                                                                                                                                                                                                     sample, specifically genotype, preCore mutations, vaccine escape mutations and RT gene mutations selected by treatment with drugs, e.g. lamivudune and penciclovir. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel hepatitis B virus genotype G, nucleic acids encoding virus, polypeptides encoded by nucleic acids, useful for preparing vaccine to
                                                         Detection and/or genetic analysis of hepatitis B virus - specifically genotype, preCore mutations, vaccine escape mutations and RT gene mutations selected by treatment with drugs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HBV genotype G; precore; HBpol; polymerase; envelope protein; preSl; preS2; surface antigen; HBsAg; HBX protein; vaccine; liver disease; hepatitis; liver cancer; HBcAg; core antigen; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zoulim F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hepatitis B virus genotype G DNA amplifying primer HBPr135.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             20.5%; Score 15; DB 1; Length 20;
88.2%; Pred. No. 2.1e+02;
ive 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Van Geyt C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            De Gendt S,
   Maertens G;
                                                                                                                        Example 1; Page 29; 80pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             907 ATTITCTTIGGICTITG 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-NOV-2000; 2000WO-US032108.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 Arrircriringiciyis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAD09117 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (PHAR-) PHARMASSET INC. (INNO-) INNOGENETICS NV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stuyver L, Schinazi R,
   Stuyver L, Rossau R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-367676/38.
                              WPI; 1997-535867/49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200138498-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-NOV-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAD09117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 39
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   ð
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis; preCore region; HBsAg region; genotype specific target; mutation detection; ss.
                                                                                                                                                                                                                                                                                                                                                                                              AAV10702-V10719 are primers used in a method to identify the novel human breast cancer gene CH1-9all-2 by differential display. The identified genes or fragments of these genes can be used for identifying genes and gene products that are intimately related to malignant transformation or maintenance of the malignant properties of cancer cells. It can also be used to design or screen diagnostic reagents or therapeutic compounds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                        Breast cancer genes - used to develop products to design or screen diagnostic reagents or therapeutic compounds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             are included within the scope of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 7 A; 2 C; 8 G; 1 T; 0 U; 1 Other;
                                                                                                                                                                                                                             (CALP-) CALIFORNIA PACIFIC MEDICAL CENT RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
. 2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 15;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Probe HBPr135 for Hepatitis b virus.
                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Fig 7; 118pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
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                                                                                                                    97WO-US005930.
                                                                                                                                                    96US-0015167P.
                                                                                                                                                                 96WO-US009286.
96US-0019202P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.08;
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                                                                                                                                                                                                 96US-00678280
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     928 TTATCCCTCCTCT
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                                                                                                                                                                                                                                                                                         WPI; 1997-512705/47.
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
Hepatitis B virus.
                                                                                                                                                                                                                                                             Chen L;
                            Homo sapiens.
                                                           WO9738085-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9740193-A2
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                                                                                                                      09-APR-1997;
                                                                                                                                                    10-APR-1996;
                                                                                                                                                                                                 11-JUL-1996;
                                                                                                                                                                   05-JUN-1996;
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19-MAY-1998
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                                                                                        16-OCT-1997
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                                                                                                                                                                                                                                                             Smith H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kits
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Gaps

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Fried M;

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genotype G DNA encoding Precore (Core protein, HBpol, envelope (Presi, Presz and surface antigen HBsAg) and HBX proteins. HBV genotype G nucleic acids and polypeptides are useful for diagnosing, prognosing and treating infections caused by HBV genotype G. They can be used in a vaccine to treat or prevent HBV genotype G. They can be used in a vaccine to treat or prevent HBV genotype G infection. The HBV genotype G derived nucleic acids and antibodies are useful for detecting HBV genotype G in a sample or diagnosis of HBV genotype G infection. The presence of HBV genotype G statistically correlates with the presence of liver damage and/or liver cancer in the subject. The HBV genotype G core insert peptide encoding nucleic acid is useful for designing monitoring assays to study and predict the evolution of anti-HBe and anti-HBc antibodies and HBAAG (genotype G e antigen) in patients infected with HBV. The antibodies or antigens of HBV genotype G are useful for identifying a stage of liver disease caused by HBV genotype G The present sequence is a PCR primer used to amplify hepatitis B virus (HBV) genotype G DNA
treat or prevent the hepatitis B virus genotype G infection in a subject.
                                                                                                                                                                                                                                                                           strain FR1,
                                                                                                                                                                                                                                                                    The present invention relates to hepatitis B virus (HBV)
                                                                                                                                     Example; Page 39; 84pp; English.
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Gaps ; 20.5%; Score 15; DB 1; Length 20; 88.2%; Pred. No. 2.1e+02; ive 1; Mismatches 1; Indels Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other; 923 907 ATTITCTTIGGICTTIG Conservative Local Similarity 15; Query Match Matches Best

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ATTTCTTTGTCTYTG 1 11

\text{AH77555/c} \tag{AAH77555 standard; DNA; 20 BP. (first entry) 19-0CT-2001 AAH77555; SSULT 40

Hepatitis B virus, HBV; preCore; Core; preSl; preSl; HBS; HBX; HBPOl; HBsAg; antiviral; vaccine; genotype G; genotyping; HBcAg; HBeAg; PCR primer; ss. HBV HBPol/HBsAg region antisense primer HBPr 135,

Hepatitis B virus.

WO200140279-A2

07-JUN-2001

20-NOV-2000; 2000WO-EP011526

99EP-00870252 99US-0169287P 03-DEC-1999; 07-DEC-1999;

(INNO-) INNOGENETICS NV

ŝ De Gendt Van Geyt C, Stuyver L,

WPI; 2001-374785/39.

Novel isolated and/or purified hepatitis B virus polypeptide and polynucleotide sequences that are phylogenetically different from HBV genotype A-F molecules, useful for HBV diagnosis, prophylaxis and

Example 1; Page 10; 94pp; English

The invention relates to the complete nucleic acid sequence of a new human hepatitis B virus (HBV) genotype, provisionally named genotype G.

0 This genotype was found with a high prevalence in patients chronically infected with HBV and residing in Europe and the USA. The invention relates to a fully defined sequence of 3248 nucleotides as given in sequence with 92% identity to the given sequence, or sequence that is degenerate to the mentioned sequences. These polymucleotides are useful for HBV genotyping. The proteins encoded by the polymucleotides are useful for detecting antibodies in a biological sample. Ligands that bind to the proteins and antibodies directed against the proteins are useful for detecting the proteins and for detecting HBCAg and HBCAG are useful for detecting the proteins. They are also useful for preparing a vaccine or medicament for primers used to amplify HBV DNA in examples demonstrating HBV genotyping and the detection of HBV genotype G DNA, using an external standard. The method comprises: use or determination of a standard concentration of microorganisms, or of DNA or RNA carried by them; and comparing the quantity of the product of reverse transcription and/or amplification of the nucleic acid produced by an unknown concentration of microorganism with the quantity of amplification product from the standard. The target microorganism, or its genome, being measured is identical to the standard, and the sample and standard are processed in parallel. The method is used to quantify microorganisms e.g. Hepatitis B virus, HBV; detection, reverse transcriptase, RT- PCR primer, viral concentration; human immunodeficiency virus; HIV; quantitation; ss. Detection and quantitation of microorganisms by measuring nucleic acid content - relative to that in known amount of the organism processed in parallel as external standard, e.g. for quantification of viral Reverse transcritase PCR primers (AAT78928-9) were used to amplify DNA from human immunodeficiency virus (HIV), gag gene, in a new method for the quantitation and detection of a microorganism that contains RNA or Gaps 0; Length 20; 1; Indels Human immunodeficiency virus gag gene RT-PCR primer. Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other; 20.5%; Score 15; DB 1; I larity 88.2%; Pred. No. 2.1e+02; Conservative 1; Mismatches 1; Example 2; Page 15; 63pp; French. 907 ATTTTCTTTGGTCTTTG 923 BP. Human immunodeficiency virus. 96WO-FR001736. 95FR-00013093. 17 ATTTTCTTTTGTCTYTG 1 AAT78929 standard; DNA; 23 (first entry) WPI; 1997-281052/25. Local Similarity les 15; Conserv (MICR-) MICRODIAG. concentration. WO9717465-A1 05-NOV-1996; 06-NOV-1995; 03-FEB-1998 15-MAY-1997. Andrieu J; Synthetic. AAT78929; Query Match Best Loc Matches RESULT 41 AAT78929 셤 à

variations of them. An Invader (TM) directed cleavage reaction of the invention is an ideal direct detection method that combines the advantages of the direct detection assays (e.g. easy quantification and minimal risk of carry-over contamination) with the specificity of a dual or tri-oligomucleotide hybridisation assay. (Updated on 25-MAR-2003 to correct PI field.)

8888888888

Sequence 21 BP; 2 A; 9 C; 2 G; 8 T; 0 U; 0 Other;

Similarity

Local

Best

Query Match

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0
      human, animal, or plant origin, cell cultures or water. It may also be used to establish the minimum number of microorganisms that is detectable, typically 5 for DNA organisms and 10-100 for RNA organisms. Specific applications are quantification of infection by HIV or hepatitis microorganisms in the sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      characterisation of nucleic acid sequences and variations in nucleic acid
bacteria, protozoa and haematozoa in any medium or specimen of
                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Thermostable structure-specific nuclease(s) - used for detection and
                                                                                                                                                                                                                                                                                                                          Pyrococcus woesei FEN-1 endonuclease gene internal 3' PCR primer
                                                                                                                                                                                                                                                                                                                                               Nucleic acid cleavage, 5' nuclease, DNA cleavage, RNA cleavage, invader directed cleavage; FEN-1; endonuclease; PCR; primer; ss.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kaiser MW;
                                                                                                              Score 15; DB 1; Length 23; Pred. No. 2.3e+02; 0; Mismatches 5; Indels
                                                                                        Sequence 23 BP; 1 A; 7 C; 3 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Brow MAD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Prudent JR,
Dahlberg JE;
                                                                                                                                                             TTCTTTGGTCTTTGCCTTTTATC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (THIR-) THIRD WAVE TECHNOLOGIES INC.
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96US-00682853.
96US-00756386.
96US-00758314.
                                                                                                               20.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97WO-US001072.
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                                                                                                                                                                                                                                            AAT76633 standard; DNA; 21
                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VI,
                                                                                                                                                                                                                                                                                          (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lyamichev N, Olive I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1997-393613/36
                                                                                                                          Local Similarity
tes 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                               Pyrococcus woesei.
                                                                                                                                                                                                                                                                                                                                                                                                                     WO9727214-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-JUL-1996;
26-NOV-1996;
                                                                                                                                                                                                                                                                                        25-MAR-2003
14-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                            31-JUL-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hall JG, I
Lyamichev N
                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sednences
                                                                                                                                                             910
                                                                                                                                                                                                                                                                 AAT76633;
                                                                                                                Query Match
                                                                                                                            Best Loca
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               preferably using a thermostable structure-specific nuclease such as FEN-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This 3' PCR primer is based on a region of sequence identity between the PEN-1 endonuclease genes of Pyrococcus furiosus (see AAV65840) and Methanococcus jannaschii (see AAV65837). It was used with a 5' primer (see AAV65843), and with external primers (see AAV65841-42) in the PCR amplification of the Pyrococcus woesei FEN1 gene. The invention relates to means for the detection and characterisation of nucleic acid sequences, and variations in nucleic acid sequences. It also relates to methods for forming a nucleic acid cleavage structure on a target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Detecting target nucleic acid by sequence-specific cleavage of complex with two specific oligonucleotides - used to detect cytomegalovirus DNA
                                                                                                                                                                                                                                                                                                               Nucleic acid detection; multiple sequential invasive cleavage; FEN-1; endonuclease; nuclease; Pyrococcus woesei; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                   Gaps
                                   .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence and cleaving this structure in a site-specific manner,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kwiatkowski RW,
20.0%; Score 14.6; DB 1; Length 21; 81.0%; Pred. No. 2.5e+02; ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4; Indels
                                                                                                                                                                                                                                                                                Pyrococcus woesei FEN-1 endonuclease gene 3' PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20.0%; Score 14.6; DB 1; Length 81.0%; Pred. No. 2.5e+02; Live 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21 BP; 2 A; 9 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lyamichev VI, Mast AL, Brow MAD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 28c; Page 204; 524pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (THIR-) THIRD WAVE TECHNOLOGIES INC.
                                                                  917 GICTLIGCCTTTIATCCCTCC 937
                                                                                        Pyrococcus furiosus.
Methanocaldococcus jannaschii.
                                                                                                                                                                                  ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98WO-US005809.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-00823516.
                                                                                                                                                                                  AAV65844 standard; DNA; 21
                                                                                                                                                                                                                                                  (first entry)
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                                  17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1998-557036/47.
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les 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9842873-A1
                                                                                                                                                                                                                                                   02-FEB-1999
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                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                   AAV65844;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hall JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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                                  Matches
                                                                                                                                                                   AAV65844
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917 GTCTTTGCCTTTTATCCCTCC 937

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An isolated oligonucleotide is claimed that encodes Pyrococcus woesei FEN — 1 endonuclease and which has a region capable of hybridising an oligonucleotide selected from the group given in AAT76630-33. These oligonucleotides can be used as primers in the PCR amplification of the FEN-1 gene for use in the large-scale production of recombinant thermostable FEN-1 endonuclease in B. coli host cells. The invention relates to means for the detection and characterisation of nucleic acids (NA) and variations in NA sequences. It also relates to methods for forming a NA cleavage structure on a target sequence and cleaving the NA cleavage structure in a site-specific manner. Claimed 5' nucleases (see AAW24210-13) are used to cleave the target-dependent cleavage structure, thereby indicating the presence of specific NA sequences or specific

primer for DNA polymerase fragment coding sequence

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the method of the invention involving the use of structure specific nucleases. In this process thermostable structure-specific nucleases are derived from mutant DNA polymerases, which can be used for detecting mutant alleles or strains of microorganisms. The structure-specific nucleases can be used in mixtures, compositions and kits to treat nucleic acid, e.g. for detection of wild type and mutant alleles of genes, for detection of wild type and mutant alleles of genes, for detection and/or identification of strains of microorganisms such as bacteria, fungi, protozoa, especially for detection of RNA viruses such as the hepatitis C virus (HCV)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This is the nucleotide sequence of a PCR primer used for amplification in
                                                                                                                                                                                                                                                                                                                                                                                   PCR; primer; amplification; Taq mutant gene; thermostable; nuclease; mutant; DNA polymerase; bacteria; fungi; protozoa; RNA virus; hepatitis C virus; HCV; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Thermostable structure-specific nuclease(s) derived from mutant DNA polymerase(s) - useful for detecting mutant allele(s) or strains of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
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Pred. No. 2.5e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                   Nucleotide sequence of the 3' Pfu FEN-1 PCR primer 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 21 BP; 2 A; 9 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lyamicheva N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (THIR-) THIRD WAVE TECHNOLOGIES INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 8; Page 281; 472pp; English.
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1 gccrargcccrrrarrccrcc
                                                                                                                                                                    BP.
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96US-00758314.
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81.0%;
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AAV24557 standard; DNA; 21
                                                                                                                                                                    AAV53955 standard; DNA; 21
                                                                                                                                                                                                                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 81.0
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pyrococcus furiosus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1998-322748/28.
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02-DEC-1996;
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16-SEP-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
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                                                                                                                                                                                                                          AAV53955;
                                                                                                           SULT 44
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This sequence is a PCR primer for DNA encoding a fragment of a Hepatitis b virus (HBV) DNA polymerase. The amplified fragment can be mutated to give the variant of a DNA virus of the invention, that replicates via an RNA intermediate. Detection of mutations in the encoded protein sequence can be used in a method for determining if a HBV isolate has reduced sensitivity to a nucleotide analogue or if its surface antigen (BAG) has reduced interaction with antibodies. Mutations in the DNA polymerase gene indicate (partial) resistance to nucleotide analogues while those in the saggemen indicate reduced interaction with specific antibodies. Detecting sequences containing these mutations is used to monitor anti-viral treatments (chemotherapy and/or vaccination) and to screen for agents
                                                                                                                                                                                                                                                                                                                                                                                                                             hepatitis B - have mutations in genes for DNA polymerase, surface antigen or region of overlapping reading frames, and show reduced sensitivity to antiviral agents or antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              that can overcome the effects of such mutations (potentially useful in long-term treatments with nucleotide analogues). (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Flap endonuclease-1; FEN-1; endonuclease; structure-specific nuclease; invasive cleavage structure; thermostable, DNA polymerase; 5' nuclease; viral infection; bacterial infection; cancer; forensic analysis;
                                 DNA polymerase, HBV; RNA intermediate, nucleotide analogue sensitivity; surface antigen interaction; sAg; antibody interaction; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                            Variants of DNA virus replicating through RNA intermediate, especially
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEN-1 related DNA used within the scope of the invention, #68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 14.6; DB 1; Length 21; Pred. No. 2.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                         De Man RA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 14 A; 4 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                         Locarnini SA, Bartholomeusz AI, Aye TT,
                                                                                                                                                                                                                                                                                                      (WHEA-) WESTERN HEALTH CARE NETWORK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    908 TITICITIGGICTITGCCTIT 928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 3; Page 20; 53pp; English.
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81.0%;
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                                                                      anti-viral therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                         WPI; 1998-297924/26.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                         Hepatitis B virus.
                                                                                                                                                            W09821317-A1
                                                                                                                                                                                                                                 15-AUG-1997;
                                                                                                                                                                                                                                                                    08-NOV-1996;
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                                                                                                                                                                                             22-MAY-1998
                                                                                                          Synthetic.
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Best Local S
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ID ADES
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(first entry)

0;

Gaps

· 0

Indels

Pred. No. 2.5e+02; 0; Mismatches 4

81.0%;

17; Conservative

WO200270755-A2

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Query Match
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Best Local Similarity
Matches 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pyrobaculam actophilum of composition of the above endomuclease in addition to that of Pyrococcus horikoshii and Aeropyrum pernix. Also claimed is a composition comprising an isolated nucleic acid sequence encoding the endomuclease mentioned above, a composition comprising a vector having the uncleic acid sequence cited above, a composition comprising a host cell and vector cited above, the species mentioned in composition (1), and a purified second structure specific nuclease selected from the species mentioned in composition (1), and a purified second structure specific nuclease and detecting a target sequence, comprising: (a) providing a sample suspected of containing the target sequence, of the target sequence, comprising: (a) oligonucleotides capable of forming an invasive cleavage structure in the presence of the target sequence and AFM-1 endomuclease selected from the species cited above and (b) exposing the sample to the oligonucleotides and FEN-1 endomuclease. The second structure specific oligonucleotides and FEN-1 endomuclease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          structure is formed between the target sequence and the oligonucleotides if the target sequence is present in the sample, where the invasive cleavage structure is cleaved by the andonuclease to form a cleavage product. The composition is useful in detecting and characterising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention discloses a new composition (I) which comprises a purified flap endonuclease-1 (FEN-1) from e.g. Sulfolobus solfataricus, Pyrobaculom aerophilum or a chimerical FEN-1 endonuclease having a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nuclease also comprises a thermostable DNA polymerase. It has a 5' nuclease derived from a DNA polymerase altered in amino acid sequence such that it exhibits reduced DNA synthetic activity from that of the wild-type DNA polymerase but retains substantially the same 5' nuclease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       specific nucleic acid sequences and sequence variants which can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New composition useful for detecting and characterizing nucleic acid sequences and sequence variants for detecting the presence of viral or bacterial infections or cancer, comprises purified or chimerical FEN-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               in detecting the presence of viral or bacterial infections, and other diseases such as cancer. The composition may also be used in forensic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acid. In detecting a target sequence, the oligonucleotides and endonuclease are mixed under conditions where an invasive cleavage
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-1 related DNA used within the scope of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 28; SEQ ID NO 83; 871pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lyamicheva N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (THIR-) THIRD WAVE TECHNOLOGIES INC.
                                                                                                                                                                                                                                                                                                     15-NOV-2001; 2001WO-US044953.
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17-NOV-2000; 2000US-00714935.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-750464/81.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lyamichev VI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      endonuclease
                                                                                                                                                             12-SEP-2002
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suspected of containing a target nucleic acid, oligonucleotides configured to hybridise to the target nucleic acid to form an invasive cleavage structure and a dendrimer to which the oligonucleotide is attached, and exposing the sample to the oligonucleotides and an agent that detects the presence of an invasive cleavage structure. The agent comprises a cleavage agent having a structure-specific nuclease, preferably a 5' nuclease comprising an endonuclease or polymerase. The detection system further comprises a spacer molecule, consisting of a carbon chain, polynucleotide or polyglycol, to which the oligonucleotide support. The target molecule and the agent are attached to a solid support. The invention is used in the detection and characterisation of nucleic acid sequences and variations in these sequences, used in allelic variation studies. This sequence represents an oligonucleotide used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a detection system which has oligonucleotides configured for hybridisation to a target nucleic acid to form an invasive cleavage structure and dendrimer, where the oligonucleotides are attached to the dendrimer. The invention also relates to a method for characterising a nucleic acid sequence comprising providing a sample
                                                                                                                                                                                                                                                                      DNAP; ss; invasive cleavage structure; dendrimer; nuclease; endonuclease; polymerase; polyglycol; 5' nuclease; allelic variation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Detection system for nucleic acid sequences comprises oligonucleotides configured for hybridizing to target nucleic acid to form invasive
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Smith LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 28; Page 103; 354pp; English.
917 GICTITGCCTTTTATCCCTCC 937
                                    21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cleavage structure and dendrimer.
                                                                                                                                                                                                                                         DNAP-related oligonucleotide #44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lyamichev V,
                                  1 GCCTATGCCCTTTATTCCTCC
                                                                                                                              BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-MAR-1998; 98WO-US005809.
09-JUL-1999; 99US-00350309.
08-FEB-2000; 2000US-0031212.
08-DEC-2000; 2000US-00732622.
                                                                                                                                                                                                                                                                                                                                                                                                                                             27-AUG-2001; 2001US-00940244.
                                                                                                                              ADA66182 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the scope of the invention.
                                                                                                                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NERI B P.
HALL J G.
                                                                                                                                                                                                                                                                                                                                                                      JS2003044796-A1.
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                                                                                                                                                                                                                                                                                                                                   Synthetic; .
                                                                                                                                                                  ADA66182;
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(HALL/)
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(SMIT/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degemerative, disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinae; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                   Gaps
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                                                      Indels
. No. 2.5e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                            HBV hammerhead ribozyme substrate sequence #179.
                                                0; Mismatches
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                                                                                                       937
                        81.0%; Pred.
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                                                                                                 917 GICTITGCCTTTTATCCCTCC
                                                                                                                                                       1 GCCTATGCCCTTTATTCCTCC
                                                                                                                                                                                                                                                                                       BP.
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08-UTN-2001; 2001US-00877478.
08-UTN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0337055P.
05-DEC-2001; 2001US-0337055P.
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                                                                                                                                                                                                                                                                                       ACD50662 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                   17; Conservative
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Roberts E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MCSWIGGEN J. MORRISSEY D.
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                        Best Local Similarity
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MACEJAK D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hepatitis B virus.
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DRAPER K.
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Draper K,
                                                                                                                                                                                                                                                                                                                                        ACD50662
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(LEEP/) 1
(DRAP/) 1
(ROBE/) F
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(MCSW/)
(MORR/)
                                                   Matches
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that modulate the expression and/or replication of HCV. The compounds methods of the invention are useful for the treament of degenerative disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, Infertailure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
                                                                                                                                                                      Gaps
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                                                                                                                                            Length 17;
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                                                                                                               Sequence 17 BP; 2 A; 2 C; 1 G; 0 T; 12 U; 0 Other;
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                                                                                                                                         19.7%; Score 14.4; DB 1; 25.0%; Pred. No. 2.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                 HBV hammerhead ribozyme substrate sequence #181.
                                                                                                                                                                     Mismatches
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                                                                                    disclosed in the present invention
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                                                                                                                                                                                                                                                                                                 BP.
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08-UUN-2001; 2001US-0087478.
08-UUN-2001; 2001US-0296876P.
24-0CT-2001; 2001US-0335659F.
05-DEC-2001; 2001US-0337055P.
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                                                                                                                                                                                                                                                                                               ACD50664 standard; RNA; 17
                                                                                                                                                     Local Similarity 25.0 es 4; Conservative
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Roberts E;
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MACEJAK D.
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DRAPER K.
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Draper K,
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(BLAT/)
(MACE/)
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Matches
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the present invention induced by the partition of the present invention and or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes. DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptuse primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular.
                                                                                                                                                                                                                                                                                                                                                                                                                                     carcinoma. The present sequence represents a substrate for one of the HBV ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences disclosed in the present invention
present invention relates to nucleic acid molecules which modulate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 0 A; 2 C; 3 G; 0 T; 12 U; 0 Other;
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Gaps ·, 19.7%; Score 14.4; DB 1; Length 17; 25.0%; Pred. No. 2.38+02; Live 11; Mismatches 1; Indels 908 TITICITIGGICTITG 923 1 vouveouvouseuse 16 Query Match
Rest Local Similarity 25.vv 9

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AAV22562 standard; DNA; 20 (first entry) 08-JUL-1998 AAV22562; AAV22562/c RESULT 50

R1 subunit; ribonucleotide reductase; cell proliferation; tumour cell; antisense; growth; inhibition; sensitivity; hydroxyurea; chemotherapeutic drug; methotrexate; PALA; treatment; ss. Antisense oligonucleotide designed to target the R1 message.

Homo sapiens. WO9805769-A2 Synthetic.

12-FEB-1998.

96US-0023040P. 02-AUG-1996; 07-MAR-1997;

97WO-CA000540.

01-AUG-1997;

(GENE-) GENESENSE TECHNOLOGIES INC.

Young AH; Wright JA,

WPI; 1998-145609/13.

Antisense oligonucleotides to ribonucleotide reductase genes - used to modulate tumour growth and inhibit tumour cell proliferation. AAV22531-89 represent antisense oligonucleotides which are targeted Claim 8; Page 48; 79pp; English.

in DNA synthesis and cell proliferation. Regulation of ribonucleotide reductase is altered in cultured malignant cells and increased levels of R2 protein and R2 mRNA have been found in pre-malignant and malignant tissues as compared to normal control tissue samples. The present antisense sequence is therefore useful for inhibiting tumourigenicity of neeplastic cells and inhibiting metastasis of tumour cells. It is also useful for increasing sensitivity of neoplastic cells to chemotherapeutic drugs, thus allowing chemotherapeutic treatments to be used in patients

have become resistant or less sensitive to chemotherapy. The sequence be RNA or DNA and may comprise a modified backbone and/or nucleotide

who

Sequence 20 BP; 12 A; 3 C; 4 G; 1 T; 0 U; 0 Other;

mRNA encoding the R1 component of mammalian ribonucleotide reductase. Ribonucleotide reductase catalyses the conversion of ribonucleotides to their corresponding deoxyribonucleotides and thus plays an important role

against the MRNA of the RI subunit sequence of ribonucleotide reductase. Aberrant expression of the R2 gene, which encodes the second subunit of the ribonucleotide reductase gene, can determine the malignant characteristics of cells. Suppression of R2 and R1 gene expression was found to reduce transformed properties of tumour cells. The antisense

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oligonuclectides can be used for modulating turmour cell growth, or for inhibiting turmour cell proliferation. They can also be used for increasing the sensitivity of neoplastic cells to chemotherapeutic drugs (especially to hydroxyurea, methotrexate (MTX), and PALA). The antisense oligonuclectides may be used to treat proliferative disorders including leukaemias, lymphomas, sarcomas, melanomas, various other forms of cancer, papillomas, arthrosclerosis, psoriasis, polythemia, mastocytosis, autoimmune diseases, anglogenesis, bacterial infections and viral infections (including HIV hepatitis, or herpes infections)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence is an antisense oligonucleotide directed against the
                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense oligonucleotide; ribonucleotide reductase; R1 protein;
R2 protein; tumour cell proliferation inhibition; cancer; cytostatic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotide, AS-I-618-20, is useful for inhibiting tumor cell growth.
                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                    Ribonucleotide reductase R1 message antisense oligo AS-I-1162-20
                                                                                                                                                                                                     ·,
                                                                                                                                                                       19.7%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 2.6e+02;
                                                                                                                                                                                                    1; Indels
                                                                                                                                             Sequence 20 BP; 12 A; 3 C; 4 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GENE-) GENESENSE TECHNOLOGIES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 3; Page 31; 137pp; English.
                                                                                                                                                                                                                                                                                                                                  ВЪ
                                                                                                                                                                                                                                 908 TTTTCTTTGGTCTTTG 923
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                                                                                                                                                                                                                                                                                                                                  AAA90791 standard; DNA; 20
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                                                                                                                                                                                                    15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Young AH;
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                                                                                                                                                                      Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
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ID AAA9
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Bacterial cell identifying PCR lower primer #1.
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GARDNER R.
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Best Local Similarity
                                                     PCR primer; ss
                                                                                                      WO200153525-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16;
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                                                                             Bacteria
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV51401-V51704 are forward PCR primers used to amplify fragments of the Zea mays genome in order to detect polymorphic markers. Such markers can be used in the construction of allele-specific primers and probes for amplification or hybridisation, e.g. to determine common or disparate ancestry between 2 or more plants, to monitor the genetic contribution of an ancestral plant, to trace the progeny of proprietary plants, in certification of a hybrid plant or to identify the progeny of a back-crossed plant with an ancestral plant
                                                                                                                                                                                                                                           Polymorphic marker, allele-specific, probe; amplification; PCR primer, hybridisation; plant; hybrid certification; genetic contribution; progeny; back-cross; hybrid; ancestry, corn; ss.
                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Brassica species allele-specific oligonucleotide probes and primers
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19.7%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 2.6e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Murigneux A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 22 BP; 4 A; 3 C; 7 G; 8 T; 0 U; 0 Other
                                                                                                                                                                                                                     Zea mays genome forward PCR primer #123.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sapolsky RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 52; 65pp; English.
                                                                                                                                         AAV51523 standard; DNA; 22 BP.
                                                 908 TITICITIGGICTITG 923
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97US-00813507
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                                                                                                                                                                                             entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             useful for plant breeding
                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Landry BS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AFFY-) AFFYMETRIX INC
                                                                                                                                                                                            (first
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            Local Similarity
                                                                                                                                                                                                                                                                                                                                   W09824796-A1
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07-MAR-1997;
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                         15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lemieux B,
                                                                         18
                                                                                                                                                                                                                                                                                                            Zea mays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAD16173;
 Query Match
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             Best Loca
Matches
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Cell isolation; bacterial cell; non-specific ligand; eukaryotic parasite;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Isolating cells from a sample, particularly bacterial cell, comprises binding the cells to a solid support by means of a non-specific ligand immobilized on the solid support.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               growth factor; HGF; c-Met; modulator; inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hepatocyte growth factor inhibiting oligonucleotide #13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hepatocyte growth factor; HGF; c-Met; modulator; inh antitumour agent; anti-metastasis agent; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                 22-JAN-2001; 2001WO-GB000240.
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ID AAV11921 standard; DNA; 20
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CCTTTTCTCCTTCCCTTC 20

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RESULT 56
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                                                                                                                                                                                        to identify sequences which modulate or inhibit expression, production or reception of hepatocyte growth factor (HGF) or expression of c-Met. Such oligonucleotides are useful as antitumour or anti-metastasis agents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAV11909-V11925, AAV11927 and AAV11928 are oligonucleotide primers used to identify sequences which modulate or inhibit expression, production or reception of hepatocyte growth factor (HGF) or expression of c-Met. Such oligonucleotides are useful as antitumour or anti-metastasis agents
                                                                                                                                                                             nseq
                                                                                                     Oligo:nucleotide inhibiting HGF production - useful as antitumour and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligo:nucleotide inhibiting HGF production - useful as antitumour and
                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                            AAV11909-V11925, AAV11927 and AAV11928 are oligonuclectide primers
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                                                                                                                                                                                                                                                                                 19.5%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 2.8e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hepatocyte growth factor; HGF; c-Met; modulator; inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hepatocyte growth factor inhibiting oligonucleotide #15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antitumour agent; anti-metastasis agent; primer; ss.
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                                                                                                                                                                                                                                                                                                                                              924 CCTTTTATCCCTCCTTC 942
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                                                                                                                                               Claim 8; Page 10; 15pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                CCTTTTCTCCTTCCCCTTC 1
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            96JP-00291499
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Best Local Similarity 84.2'
Matches 16; Conservative
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                                                                                                                   anti-metastatic agent.
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                                         (TERU ) TERUMO CORP.
                                                                     WPI; 1998-340665/30.
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Matches 16; Conser
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            01-NOV-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
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Human; MEKK4 modulation; mitogen-activated protein kinase kinase 4; MTK1; MAP3K4; MAP three kinase 1; MAP/ERK kinase kinase 4; MAPKKK4; cytostatic; prophylaxis; immunological; hyperproliferative disorder; cancer; therapy; antisense; inflammatory; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to antisense compounds, compositions and methods for modulating the expression of MEKK4 (also referred as mitogenactivated protein kinase kinase 4; MAP3K4; MAP three kinase 1; MAP/ERK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compound targeted to nucleic acid encoding mitogen-
activated protein kinase 4, useful for treating immunologic disorder,
inflammatory disorder or cancer.
                                                                                                                                                                                                                                                                "mod base= OTHER
'note= "2'-methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                     note = "2'-methoxyethyl nucleotides"
                                                                        Human MEKK4 antisense oligonucleotide, ISIS #123142.
                                                                                                                                                                                                                                'note= "Phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        됬;
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                                                                                                                                                                                   Location/Qualifiers
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/*tag= c
/mod_base= OTHER
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/mod_base= m5c
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          AAD37207 standard; DNA;
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                                                                                                                                                               Synthetic.
                                AAD37207;
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AAD37207
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924 CCTTTTATCCCTCCTTT 942

Conservative

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diagnostics, therapeutics, prophylaxis and as research reagents and kits. They are also useful in antisense therapy. The present sequence is an antisense oligomucleotide targetted to human MEKK4 DNA. This sequence is used in the exemplification of the invention
kinase kinase 4; MAPKKK4; MTK1). The antisense oligos are useful for inhibiting the expression of MEKK4 in cells or tissues. They are also useful for treating an animal having a disease or condition associated with MEKK4 such as immunological, inflammatory, hyperproliferative disorder or cancer. Sequences of the invention are also useful for
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G; 11 T; 0 U; 0 Other; Sequence 20 BP; 2 A; 5 C; 2

0; Query Match
Best Local Similarity 84.2%; Pred. No. 2.8e+02;
Matches 16; Conservative 0; Mismatches 3; Indels

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\$31999/c 3SULT 57

AAS97999 standard; DNA; 21 BP.

AAS97999;

(first entry)

12-MAR-2002

Murine SAC1 gene-specific oligonucleotide PCR primer #552.

Human; mouse; SAC1; carbohydrate; sweetener; ethanol; alcoholism; ss; bobsity; diabetees; transgenic embryo; body tissue; body fluid; pancreas; blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy; protein replacement therapy.

Mus sp.

WO200183749-A2,

08-NOV-2001

25-APR-2001; 2001WO-US013387

28-APR-2000; 2000US-0200794P. 28-JUL-2000; 2000US-0221419P. 10-NOV-2000; 2000US-0247443P.

CHEM SENSES CENT 8 (WARN) WARNER LAMBERT (MONE-) MONELL CHEM SEN

검 ຜ Ë De Jong PJ, Chatterjee A, Tordoff MG; Beauchamp GK, 1 DR, Ross D, Reed DR, Bachmanov AA, Ohmen JD,

WPI; 2002-075162/10.

Novel isolated polypeptide comprising variant form of mouse or human SACI polypeptide, and is associated with altered preference for carbohydrates or other sweeteners, useful for preventing obesity, diabetes, alcoholism for carbohydrates

Claim 14; Page 95; 239pp; English.

The invention relates to an isolated polypeptide, comprising a variant form of mouse or human SACI polypeptide. The variant form is associated with altered preference for carbohydrates, other sweeteners or ethanol. The polypeptide and its associated DNA sequence can be produced by recombinant techniques and is useful for preventing obesity, diabetes or alcoholism associated with SACI expression. The sequences are useful in screening for drugs and sweeteners. Recombinant cell lines and transgenic embryos may be used in screening for and identifying agents that induce or repress function of SACI. Predisposition to diabetes, obseity or alcoholism can be ascertained by testing any fluid or tissue of a human (such as blood, pancreas or tongue) for sequence variations of the SACI

as tumour marker protein to verify that a strongal tumour is from endometrium. The antibody is useful for promoting or decreasing fertility or pregnancy, and also for treating endometrial strongal tumours. The present nucleic acid sequence represents a PCR primer that was used in the methods of the invention for amplification of the human jAZFI gene

Sequence 20 BP; 3 A; 10 C; 0 G; 7 T; 0 U; 0 Other;

located on chromosome

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gene. A sequence variation of the SAC1 locus may indicate a predisposition to diabetes, obesity and/or alcoholism and may provide a diagnostic mark. The polymucleotide can be detected in a biological sample by contacting the DNA with a probe to form a hybridisation complex which is then detected. The sequences represent cDNA encoding human and mouse SAC1 polypeptides and PCR primers specific for the SCA1 genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to a new jAZF1 (juxtaposed with another zinc finger), jjAZ1 (joined with jAZF1) or jAZF1/jjAZ1 polypeptide. The methods of the invention can be used to identify a compound which controls proliferation of endometrial stroma, by expressing jjAZ in the presence of the compound, and determining whether the compound affects expression of jjAZ. jAZF1, jjAZ1 or jAZF1/jjAZ1 or jAZF1/jjAZ1 or jAZF1/jjAZ1 or jAZF1/jjAZ1 or test anti-jAZF1, jjAZ1 or jAZF1/jjAZ1 antibodies. The invention can be used as bait proteins in a two hybrid assay or three hybrid assay to identify other proteins which bind or interact with jAZF1/jAZ1-binding proteins. jAZF1, jjAZ1 or jAZF1/jjAZ1-binding proteins. jAZF1, jjAZ1 or jAZF1/jjAZ1 molecules are useful for identifying the origin of tumour and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human, jAZF1, juxtaposed with another zinc finger; jjAZ1; jAZF1,jjAZ1; joined with jAZF1; proliferation; endometrial stroma tumour; immunogen; antigen; antibody; fertility; pregnancy; gene therapy; vaccine; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel jAZF1, jjAZ1 or jAZF1/jjAZ1 polypeptides useful as immunogens or antigens to raise or test anti-jAZF1, jjAZ1 or jAZF1/jjAZ1 antibodies.
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                                                                                                                                                                   19.5%; Score 14.2; DB 1; Length 21; 84.2%; Pred. No. 2.9e+02; ive 0; Mismatches 3; Indels
                                                                                                                                 Sequence 21 BP; 11 A; 0 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (BGHM.) BRIGHAM & WOMENS HOSPITAL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human jAZF1 PCR primer 7SenseInner.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 8; Page 58; 76pp; English.
                                                                                                                                                                                                                                            927 TITATCCTCCTCTTCATT 945
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                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                        ABK89166 standard; DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sklar J;
                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200193805-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                    Monitoring anti-HBV drug resistance by genetic detection of mutations in DNA polymerase of HBV in patient's sample, involves hybridizing the polynucleic acids of the sample with a probe and detecting the hybrid.
                                                                                                                                                                                                 HBV; hepatitis B virus; DNA polymerase gene; anti-HBV drug resistance; mutation detection; PCR primer; ss.
                              Gaps
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  Score 14; DB 1; Lengtn zv,
Pred. No. 38+02;
--^has 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Murine GABA transporter 4 (GAT4) forward PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 11 A; 2 C; 5 G; 2 T; 0 U; 0 Other;
   19.2%; Scc...
100.0%; Pred. No. c...
... 0; Mismatches
                                                                                                                                                                             HBV DNA polymerase gene PCR primer HBPr135A
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 4; Page 12; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             907 ATTTTCTTTGGTCTTTG 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                         05-JUL-2000; 2000WO-EP006306.
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                                                             7 CCCTCCTCTTCATT 20
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                                                                                                                    AAF56085 standard; DNA; 20
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                                                                                                                                                           18-APR-2001 (first entry)
                              Conservative
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                                                932 CCCTCCTCTTCATT
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Query Match
Best Local Similarity
Les 14; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                              Hepatitis B virus
                                                                                                                                                                                                                                                 WO200104358-A2.
                                                                                                                                                                                                                                                                                                            08-JUL-1999;
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                                                                                                                                        AAF56085;
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                                                                                                            AAF56085/c
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                                                                                                  RESULT 59
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The present sequence is that of a forward primer for the murine gamma-
aminobutyric acid (GABA) transporter 4 (GAT4). Use with a reverse primer
ADD89935 generates a 214 bp cDNA product. RT-PCR was used to identify
genes in the murine brain that are differentially expressed upon
treatment with 3.4-methylenedioxymethamphetamine (MDNA or Ecstasy). The
troughlates the expression of various GABA transporter genes, especially
GAT1 and GAT4, within the brain. Differential display PCR showed
induction of GAT1 and GAT4 mRNA and protein levels following MDNA
exposure. Methods are provided for treating or preventing the symptoms
associated with MDNA or related drugs, including psychostimulation,
hallucination, memory loss, long-lasting changes in behaviour, acute
toxicity and hyperthermia, by administering an agent which inhibits GABA
uptake or a nucleic acid molecule capable of reducing the expression of
GABA transporter in the brain, such as an antisense molecule or a double-
stranded RNA. Note: The present sequence is identified as SEQ ID 16 on
page 28 of the specification, but as Seq ID 18 in the sequence listing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Use of a gamma-amino butyric acid reuptake inhibitor for treating symptoms e.g. hallucination and memory loss associated with ingestion of methylenedioxymethamphetamine or related psychoactive drugs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mitogen-activated protein kinase, MAPK kinase, MAPK, MKK7; SAPK/JNK; stress activated protein kinase, cJun N-terminal kinase, SAPK, JNK; Fas antigen; graft-versus-log disease; toxic epidermal necrolysis; lupus; IgA kidney disease; gene therapy; p38; TNF-alpha; PCR primer; ss.
Ecstasy; 3,4-methylenedioxymethamphetamine; MDMA; nootropic;
neuroprotective; neuroleptic; mouse; gene therapy; GABA transporter 4;
GAT4; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Page 28; 28pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           929
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                                                                                                                                                                                                                                                                                                                                                                                                                           (YEDA ) YEDA RES & DEV CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
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                                                                                                                                                                                                                                                                                                             13-MAR-2003; 2003WO-IL000214.
                                                                                                                                                                                                                                                                                                                                                                    18-MAR-2002; 2002US-0364603P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18.9%;
88.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           913 TTTGGTCTTTGCCTTTT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Peng W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-788190/74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                             WO2003077831-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Simantov R,
                                                                                                                                                                                                                                                   25-SEP-2003
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Best Local S
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AAX91991-X97517 represent PCR primers used to amplify open reading frames and other nucleic acid sequences from the genome of Chlamydia pneumoniae (see AAX1990). C. pneumoniae causes respiratory disease such as pneumonia and bronchitis and is thought to be a contributing factor in heart disease, sarcoidosis, sinusitis, purulent citis media, erythema nodosum or pharyngitis. The polypeptides encoded by the open reading frames of the C. pneumoniae genome (see AAX148494 - AAX15879) can be used in immunogenic compositions as vaccines. Vectors containing C. pneumoniae especially where the vector directs the expression of a neutralising epitope of C. pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    base= OTHER
= "Other= All cytisines are 5-methyl cytosines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Integrin alpha 4; antisense; very late antigen 4; VLA4; autoimmune disease; inflammatory disease; rheumatoid arthritis; multiple sclerosis; tumour metastasis; melanoma; asthma; psoriasis; allergy; Grave's disease; Hashimoto's thyroiditis; oligomuclectide; systemic lupus erythematosus; allograft rejection; ISIS 107254; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense oligonucleotide for human integrin alpha 4, ISIS 107254.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20;
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/note= "Other= Phosphorothioate backbone"
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 2 A; 5 C; 5 G; 8 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 13.6; DB 1;
Pred. No. 3.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                   Genome sequence of Chlamydia pneumoniae.
                                                                                                                                                        Page 1735; Disclosure; 1912pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
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/mod_base= OTHER
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/mod base= OTHER
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80.0%;
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/note= '
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                                                                            WPI; 1999-357842/30.
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modified_base
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                                     Griffais R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAS10302;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAS10302
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a novel mitogen-activated protein kinase (WAPK) kinase, designated MKK7 of vertebrate origin and widely expressed in Lissues. The invention provides nucleic acid sequences encoding human and mouse MKK7 activates SAPK/JNK (stress activated protein kinase /c-Uun N-terminal kinase) in response to stimulation by Fas antigen or TNF-alpha but does not activate p38. Host cells transformed with expression vectors comprising the MKK7 nucleic acids are used for the recombinant production of the proteins. The products may be used for screening of candidate inhibitors or promoters of the MAPK kinase cascade useful for treatment of diseases (such as graft-versus-host disease, toxic epidermal necrolysis, lupus and IgA kidney disease) in which abnormal activation or deactivation of this cascade is involved. The products may also be useful for production of diagnostic reagents for these diseases as well as gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis; sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine; neutralising epitope; PCR primer; ss.
                                                                                                                                                                                                                                                                                          New mitogen activated protein kinase kinase of vertebrate origin -activates SAPK/JNK (but not p38) stimulation in response to Fas antigen or TNF-alpha, used in, e.g. gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 13.6; DB 1; Length 20;
Pred. No. 3.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR primer used to amplify an ORF of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 1 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                               Matsuzaki O;
                                                                                                                                                                                                                                                                                                                                                                        Example 2; Page 35; 92pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  913 TITGGICTITGCCTITIAIC 932
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                          (ASAH ) ASAHI KASEI KOGYO KK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97FR-00014673.
98US-0107078P.
                                                                                              98WO-JP003016
                                                                                                                                     97JP-00193207
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1 Similarity 80.0%;
16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX95277 standard; DNA; 20
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                                                                                                                                                                                                               Moriguchi T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
Chlamydophila pneumoniae.
                                                                                                                                                                                                                                                       WPI; 1999~106059/09.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                   03-JUL-1997;
                WO9901559-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9927105-A2
                                                                                            03-JUL-1998;
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04-NOV-1998;
                                                       14-JAN-1999
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                                                                                                                                                                                                               Nishida E,
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therapy

AAX95277;

SULT 62

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Gaps

schultz1-899.rng

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WPI; 2002-583481/62
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABT05172;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABT05172,
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The sequence is an antisense oligonucleotide targetting human integrin 4, relates to antisense inhibitors of integrin alpha 4 which target and inhibit expression of integrin alpha 4. The antisense molecules are useful for inhibiting the expression of integrin alpha 4. The antisense molecules are useful for inhibiting the expression of integrin alpha 4. The antisense molecules are tissues, treating an animal having a disease or condition associated with expression of integrin alpha 4, e.g., inflammatory disease or condition, autoimmune disease or condition including rheumatorid arthritis, multiple sclerosis and tumour metastases, melanoma, asthma, psoriasis, allergy, Grave's disease, Hashimoto's thyroiditis, systemic lupus erythematosus and allograft rejection, and diseases or conditions characterised by leukocyte migration into affected tissues, preferably central nervous system tissues. The antisense molecules are also useful for reducing the levels of ViA-4 and alphabeta7 integrin in human cells or tissues, and reducing the adherence of cells of a first type e.g., melanoma cells or lymphocytes, to cells of a second type e.g., endothelial cells or inhibiting integrin alpha4 expression and thus decreasing adhesion of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                 Composition for treating inflammatory and autoimmune diseases, comprises antisense compound targeted to nucleic acid molecule encoding integrin alpha4 and inhibit expression of integrin alpha4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 2 A; 5 C; 3 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human chromosome 1p36-35 PCR primer SEQ ID NO:791.
                                                                                                                                  Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     945 TGGTTTAATGTATCGCTACC 964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            recriragiciriciciace 20
                                                                                                                                                                                                                                 Claim 12; Col 49; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-MAR-2001; 2001JP-00068285.
                                                           99US-00377309.
                                                                                  98US-00166203
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-APR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 18.6
Best Local Similarity 80.0
Matches 16; Conservative
                                                                                                                                  Condon TP,
                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                         WPI; 2001-450381/48.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                           19-AUG-1999;
                                                                                   05-OCT-1998;
          US6258790-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PCR primer;
                                  10-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-NOV-2001
                                                                                                                                  Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABL43747;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABL43747/c
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The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal resultant cultures are amplified broducts (h) the clones in the multiwell carl discrimination Nos are mixed respectively in each wells of longitudinal resultant cultures are amplified broducts; (h) the clones in the multiwell plates of the specified from the amplified products; (h) the clones in the multiwell plates are sometified products; (h) the clones in the multiwell plates are sometified products; (h) the clones in the multiwell plates are sometified products; (h) the clones in the multiwell plates are sometified products; (h) the clones in the multiwell plates are sometified broducts; (h) the clones in the multiwell plates are sometified broducts; (h) the clones in the multiwell plates are sometified broducts; (h) the clones are
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    plates are specified from the defected result, and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. AB142957 to AB145322 represent PCR primers for human chromosome 1936-35 DNA, and AB145323 to AB145634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; mouse; murine; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NFR1 expression modulation related antisense oligo SEQ ID No 202.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dean NM;
                                                                                                                                                                                                                                                                                                                                                                             Claim 4; Page 20; 528pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             921 ITGCCTTTTATCCCTCCTCT 940
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(RIKA ) RIKAGAKU KENKYUSHO.
(GENO-) GENOTEX YG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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les 16; Conservative
                                                                                                                                                                                                                                                                             Arraying genome clones.
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                                                                                                                                                                  WPI; 2002-144136/19.
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Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

Example 21; Page 61; 121pp; English.

The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor I (TMFNI), where the antisense compound inhibits expression of TWFRI. The antisense compound is useful for inhibiting the expression of TWFRI in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TWFNI, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TWFRI. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a mouse oligonucleotide relating to the TWFRI of the invention

Sequence 20 BP; 8 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 18.6%; Score 13.6; DB 1; Length 20; Best Local Similarity 80.0%; Pred. No. 3.5e+02; Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps

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940 TTCATTGGTTTAATGTATCG 959

SULT 66

ABZ99185 standard; DNA; 20 BP.

ABZ99185;

17-OCT-2003 (first entry)

Human PDE4C oligonucleotide sequence.

Human, antisense, lung dysfunction, nasal airway dysfunction, antiinflammatory steroid, ubiquinone, antiinflammatory, antiallergic, antiathmatic, hypotensive, immunosuppressive, cytostatic, gene therapy, antisense gene therapy, respiratory, lung, adenosine sensitivity, adenosine receptor; bronchodilation, bronchoconstriction, lung allergy, lung inflammation, respiratory disease, ds.

Homo sapiens.

WO200285308-A2

31-0CT-2002.

23-APR-2002; 2002WO-US013135.

24-APR-2001; 2001US-0286137P

(EPIG-) EPIGENESIS PHARM INC.

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D; Miller S, Tang L, Shahabuddin S;

WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

Disclosure; SEQ ID NO 14427; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonuclectide antisense to the

initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or naal airway dysfunction and a second active agent comprising an continiflammatory steroid and ubiquinone. A composition of the invention and traininflammatory, antiallergic, antiasthmatic, hypotensive, cimmunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or cyeventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of adenosine creceptor, producing pronchodilation, increasing levels of ubiquinone or lung surfactant in a subject s tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at fire.wipo.int/pub/published_pot_sequences ·. The invention relates to a method for determining whether a test compound is a candidate antibacterial compound. The method comprising: contacting an S-yaew polypeptide with the test compound, and detecting interaction of the test compound with the S-yacaM or S-yaeJ polypeptide, where an interaction indicates that the test compound is a candidate antibacterial compound. A method is claimed for treating a bacterial infection in an organism by administering a therapeutically effective amount of a pharmaceutical formulation and where the bacterial infection Method for determining whether a test compound is a candidate antibacterial compound by its effect on the polypeptides encoded by the Gaps ·. Length 20; S-yacM protein; S-yqeJ protein; pharmaceutical formulation; bacterial infection; antibacterial; PCR; primer; ss. 4; Indels Sequence 20 BP; 0 A; 11 C; 0 G; 9 T; 0 U; 0 Other; Score 13.6; DB 1; Pred. No. 3.5e+02; 0; Mismatches 4; Disclosure; Page 15; 49pp; English. 925 CTTTTATCCCTCCTCTTCAT 944 crerrececercicitation 20 Guzman L; yacM gene specific PCR primer 1. BP. 21-FEB-2002; 2002WO-US005086. 23-FEB-2001; 2001US-00792251. (MILL-) MILLENNIUM PHARM INC. 18.6%; 80.08; 20 (first entry) Query Match 18.6 Best Local Similarity 80.0 Matches 16; Conservative AAD48785 standard; DNA; genes yacM and S-ygeJ. Youngman P, WPI; 2003-058529/05. WO200281652-A2. 07-MAR-2003 Unidentified. 17-OCT-2002. AAD48785; Fritz C, RESULT 67 AAD48785/ d õ

haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia, Alzheimer's disease, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting oligonucleotides of the invention

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Gaps

0

Length 17; 1; Indels

Score 13.4; DB 1; Pred. No. 3.4e+02; 0; Mismatches 1;

Query Match
Best Local Similarity 93.3%;
Matches 14; Conservative (

953 TGTATCGCTACCAAC 967 TGTATCGCTACAAAC 17

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m

0 U; 0 Other

Sequence 17 BP; 5 A; 4 C; 2 G; 6 T;

823332

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0;
                                                                                                                                                                                                                                                                                                                                                    Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE; mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein B; LDLR; familial hypercholesterolaemia; UGTI; syndrome; APP; FSENI; antisense; UDP-glucuronosyltransferase; amyloid precursor protein; presentilin-1; Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
is a Streptococcus infection. An antibacterial agent can also be administered to treat a bacterial infection in an organism. The present sequence is yacM gene specific PCR primer
                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                           Retinoblastoma mutation correcting oligonucleotide SEQ ID NO: 560.
                                                                                                                 o,
                                                                                    18.6%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 3.5e+02;
                                                                                                                4; Indels
                                                           Sequence 20 BP; 11 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                 0; Mismatches
                                                                                                                                           905 TCATTTTCTTTGGTCTTTGC 924
                                                                                                                                                                   rcartrircingcccrtrgc 1
                                                                                                                                                                                                                                        ABA77714 standard; DNA; 17
                                                                                                                                                                                                                                                                                                (first entry)
                                                                                    Query Match 18.69
Best Local Similarity 80.09
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antilipemic; ss.
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                                                                                                                                                                                                              RESULT 68
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Oligonuclectide for targeted alterations of genetic sequences and for treating cystic fibrosis, comprises at least one mismatch and chemical modification.
                                                                                                                                                                                                                                                                                                                      Rice MC
                                                                                                            27-MAR-2000; 2000US-0192176P.
27-MAR-2000; 2000US-0192179P.
01-UN-2000; 2000US-0208538P.
30-OCT-2000; 2000US-0208538P.
                                                      27-MAR-2001; 2001WO-US009761.
                                                                                                                                                                                                                                                                                                                Kmiec EB, Gamper HB,
                                                                                                                                                                                                                                                          (UYDE ) UNIV DELAWARE.
                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-639230/73.
04-OCT-2001
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The present invention provides single-stranded oligonucleotides which can obe used for the targeted alteration of genomic sequences, where the oligonucleotide has at least one mismatch compared with the genomic sequence to be altered. In particular, these sequences are directed at the following genes: adenosine deaminase, p53, beta-globin, retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A (CDKN2A), APC, Factor VI, Factor IX, haemoglobin alpha locus 1 (HBA2), haemoglobin alpha locus 2 (HBA2), Mill, MSH2, MSH6, apolipoprotein E (APOE), LDL receptor (LDDR), UDP-glucuronosyltransferase (UGTI), amyloid precursor protein (APC), presenilin-1 (PSEN1) and presenilin-2 (PSEN2). These can be used in the gene therapy of diseases such as cancer, adenosine deaminase deficiency, cystic fibrosis,

Claim 7; Page 77; 294pp; English.

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be used for the targeted alteration of genomic sequences, where the oligonucleotide has at least one mismatch compared with the genomic sequence to be altered. In particular, these sequences are directed at the following genes: adenosine deaminase, p53, beta-globin, retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase (UGT1), amyloid precursor protein (APC), presentiin-1 (PSEN1) and presentiin-2 (PSEN2). These can be used in the gene therapy of diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention provides single-stranded oligonucleotides which can
                                                                                                                                                                                            Human; gene therapy, adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor UII; Factor IX; thrombosis; haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
                                                                                                                                                                                                                                                                                                mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein B; LDLR; familial hypercholesterolaemia; UGT1; syndrome; APP; FSSN1; antisense; UDP-glucurconosyltransferaes; anyloid precursor protein; presenilin-1; Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oligonuclectide for targeted alterations of genetic sequences and for treating cystic fibrosis, comprises at least one mismatch and chemical modification.
                                                                                                                                                         Retinoblastoma mutation correcting oligonucleotide SEQ ID NO: 559.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 7; Page 77; 294pp; English.
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                                     ABA77713 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-MAR-2000; 2000US-0192176P.
27-MAR-2000; 2000US-019219P.
01-UUN-2000; 2000US-0208538P.
30-OCT-2000; 2000US-024889P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-MAR-2001; 2001WO-US009761
                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gamper HB,
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                                                                                                                                                                                                                                                                                                                                                                                  antilipemic; ss
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                                                                                                                 24-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
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                                                                            ABA77713;
RESULT 69
                    ABA77713
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Mon Oct 18 14:40:13 2004

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virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HBV inozyme substrate sequence #208.
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08-UUN-2001; 2001US-00877478.
08-UUN-2001; 2001US-0296876P.
24-0CT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACD52078 standard; RNA; 17
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                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 26.78
Then 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
PAVCO P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hepatitis B virus.
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DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ROBERTS E
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(ROBE/)
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(MACE/)
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(PAVC/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 71
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Rhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
such as cancer, adenosine deaminase deficiency, cystic fibrosis, haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia, Alzheimer's disease, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting
                                                                                                                                                                                               Gaps
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                                                                                                                                                                                               0;
                                                                                                                                                      Query Match 18.4%; Score 13.4; DB 1; Length 17; Best Local Similarity 93.3%; Pred. No. 3.4e+02; Matches 14; Conservative 0; Mismatches 1; Indels
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                                                                                                                  Sequence 17 BP; 6 A; 2 C; 4 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HBV G-cleaver substrate sequence #155.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Page 168; 387pp; English.
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                                                                           oligonuclectides of the invention
                                                                                                                                                                                                                                                                                                                                                                 BP.
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08-UJN-2001; 2001US-00877478.
08-UJN-2001; 2001US-0296876P.
24-0CT-2001; 2001US-0335659P.
05-DEC-2001; 2001US-0337055P.
                                                                                                                                                                                                                                 953 TGTATCGCTACCAAC 967
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                                                                                                                                                                                                                                                                                                                                                                 ACD53467 standard; RNA; 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
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Roberts E;
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MCSWIGGEN J.
MORRISSEY D.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hepatitis B virus.
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DRAPER K.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAVCO P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200281494-A1.
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Draper K,
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(BLAT/)
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(MCSW/)
(MORR/)
                                                                                                                                                                                                                                                                                                                            SULT 70
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Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, inozymes, anberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well as oligonuclectides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV cymes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds compounds and mat/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HBV inclosed in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleic acid molecule, Hepatitis C virus, HCV; Hepatitis B virus, HBV; RNA stability; RNA expersesion; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; bNAzyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                Length 17;
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                                                                                                                                                                                                                                                                                                                                                                                            18.4%; Score 13.4; DB 1; 26.7%; Pred. No. 3.4e+02; iive 10; Mismatches 1;
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Roberts E;
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Draper K,
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Claim 1; Page 53; 178pp; English.

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Penger A, Sprenger R,
                                                                                                                                                                                    WPI; 2003-167344/16.
  WPI; 2003-229207/22
                                                                                  Local Similarity
                                                                                                                                                   WO200299099-A2
                                                                                                                                              Homo sapiens
                                                                                                                                                         12-DEC-2002.
                                                                                                                        28-JUL-2003
                                                                                      4
             infection.
                                                                   ribozyme,
                                                                                                                   ACA98830;
                                                                                Query Match
                                                                                                           ACA98830/c
                                                                                   Best Loca
Matches
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for diagnosing a disease, or for preparing a pharmaceutical composition for treating a disease. This disease includes arachidonic acid metabolism, cancer or cardiovascular diseases. This sequence represents a primer used to isolate regions of the human cytochrome P450 polypetide 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism (SNP) in that region of different individuals useful in disease diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism; cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy; single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.
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                                                      The invention describes a new polynucleotide comprises a polynucleotide: (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined in the specification; (b) encoding any of seven polypeptides having 7 amino acids, or a polypeptide with 3 amino acids; (c) capable of hybridising to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d) encoding a molecular cypt2C8 variant polypeptide or its fragment. The polynucleotide, gene, vector, polypeptide or antibody is useful for diagnosing or treating a disease, for preparing a diagnostic composition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19 BP; 7 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                  The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such a mammerhead ribozymes. DNAzymes, inczymes, anberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HBV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism; cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy; single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.
                                                                                                 Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 2 A; 3 C; 1 G; 0 T; 11 U; 0 Other;
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                                                                                                                                                                                                                                        Example 1; Page 154; 387pp; English.
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BP.

The invention describes a new polynucleotide comprises a polynucleotide:

(a) having any of 101 nucleic acid sequences with 18-19 bp fully defined in the specification; (b) encoding any of seven polypeptides having 7 amino acids, or a polypeptide with 3 amino acids; (c) capable of hybridising to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d) encoding a molecular CYP2C8 variant polypeptide or its fragment. The polynucleotide, gene, vector, polypeptide or antibody is useful for diagnosing or treating a disease, for preparing a disease, composition for diagnosing a disease, or for preparing a pharmaceutical composition

New polymorphic variants of the gene encoding Cytochrome P450 polypeptide 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g. arachidonic acid metabolism, cancer or cardiovascular diseases.

Brinkmann U;

Brinkmann U;

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Gaps

0

Length 19; 1; Indels

Score 13.4; DB 1; Pred. No. 3.7e+02;

0; Mismatches

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The invention relates to antisense compounds targetted to a nucleic acid molecule encoding human SR-cyp (Clk-associated RS cyclophilin) to inhibit its expression. SR-cyp is also referred to as CARS-cyp. Antisense compounds of the invention are used for treating diseases or conditions associated with SR-cyp. The diseases treated include hyperproliferative disorders e.g. cancer or hyperproliferative disorders resulting from an alternative splicing event. They are useful for diagnostics, therapeutics and as research reagents, e.g. prophylactically to prevent or delay infection, inflammation or tumour formation. They are also used in antisense therapy. The present sequence is an antisense oligonucleotide targetted to human SR-cyp.
                                                  Novel antisense compounds targeted to nucleic acids encoding SR-cyp, Clk-associated RS cyclophilin for modulating the gene expression and treating hyperproliferative disorders such as cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; histone deacetylase 1; HDA1; enzyme; hyperproliferative condition; viral infection; prophylactic; inflammation; phosphorothicate backbone; tumour; antisense; cytostatic; virucide; ss.
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/mod_base= OTHER
/note= "Phosphorothioate backbone"
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/note= "2'-methoxyethyl residues"
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                                                                                                                                                             Claim 3; Page 90; 117pp; English.
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/mod_base= m5c
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12. .13
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9. .10
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/mod_base= 1
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for treating a disease. This disease includes arachidonic acid metabolism, cancer or cardiovascular diseases. This sequence represents a primer used to isolate regions of the human cytochrome P450 polypetide 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism (SNP) in that region of different individuals useful in disease diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; antisense; SR-cyp; Clk-associated RS cyclophilin; inflammation; hyperproliferative disorder; cancer; prophylaxis; infection; therapy; tumour; CARS-cyp; phosphorothioate backbone; ss.
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18.4%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 3.7e+02;
Matches 14; Conservative 0; Mismatches 1; Indels
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/*tag= b
//hote= DTHER
/hote= "2'methoxyethyl nucleotides"
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19. c.o
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/note= "Phosphorothioate backbone"
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6. .20
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/mod_base= m5c
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SPRING HARBOR LAB.
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/mod_base= r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAD39631 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                *tag= f
                                                                                                                                                                                                                                                                                                             899 CCCTGGTCATTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200236809-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
modified_base
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(COLD-) COLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-MAY-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAD39631;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           SULT 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ND39631
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            methods for modulating the expression of Histone deacetylase I (HDA1).
Sequences of the invention are useful for inhibiting the expression of HDA1 in cells or tissues and for treating an animal having a disease or condition associated with HDA1 e.g., hyperproliferative condition, which is cancer of haematopoietic, lymphoid, myeloid or breast or a condition resulting from a viral infection. Antisense compounds either alone or in combination with other antisense compounds or therapeutics can be used as tools in differential and/or combinatorial analyses to elucidate the expression patterns of a portion or the entire complement of genes expressed within cells and tissues. They are commonly used as research reagents and diagnostics. They may also be useful prophylactically such as to prevent or delay infection, inflammation or tumour formation. The present DNA sequence is an antisense oligonucleotide targetted to human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to antisense compounds, compositions and
                                                                                                                                                                                                                                                                                                                                                                        Antisense compounds targeted against polynucleotides encoding Histone
                                                                                                                                                                                                                                                                                                                                                                                     deacetylase l'useful for treating hyperproliferative conditions, e.g. cancer of hematopoietic, lymphoid, myeloid or breast, or a viral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18.4%; Score 13.4; DB 1; Length 20; 93.3%; Pred. No. 3.8e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 1 A; 12 C; 1 G; 6 T; 0 U; 0 Other;
                                                        /mod_base= OTHER
/note= "2'-methoxyethyl residues"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human chromosome alpha-satellite region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 3; Page 94; 120pp; English
           /mod_base= m5c
16. .20
                                                                                                    /*tag= j
/mod_base= m5c
                                                                                                                                                                                                                07-DEC-2001; 2001WO-US046518.
                                                                                                                                                                                                                                             19-DEC-2000; 2000US-00745167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           929 TATCCCTCCTCTTCA 943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTCCCTCCTCTTCA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX61163 standard; DNA; 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 93.3*
                                             U
                                        *tag=
/*tag=
                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                           Wyatt JR;
                                                                                                                                                                                                                                                                                                                                        WPI; 2002-519880/55
                                                                                                                                                    WO200250244-A2
                         modified base
                                                                                        modified base
                                                                                                                                                                                 27-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                     infection
                                                                                                                                                                                                                                                                                                         Monia BP,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX61163;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX61163
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                                                                                                                                                                                                                                                                         This sequence represents a human chromosome alpha-satellite region. The invention relates to the use of a triple-helix forming oligomoleotide for in situ detection of a double-stranded target mucleic acid sequence. The method can be used to detect a genetic disorder e.g. to detect an extra or missing chromosome or fragment or aneuploidy, especially for detecting an extra or missing chromosome 17 or 21. The method can be also be used to screen for individuals at risk of developing a disease or for diagnosing an infectious disease. The use of triple helix forming oligomucleotides allows in situ detection of double stranded target
                                                                                                                                                                                                                                                                                                                                                                                                       sequence as opposed to prior art uses of developing potential anti-gene therapeutic agents or artificial restriction endonucleases
                                                                                                                                                                                                      Novel use of triple helix forming oligonucleotides, useful for in situ detection of double stranded target sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HLA; polymerase chain reaction; PCR; paternity testing; transplant compatibility; anthropology; HLA-DQalpha locus; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag= a
/mod_base= aminotetraethylene glycol linker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18.1%; Score 13.2; DB 1; Length 18; 83.3%; Pred. No. 3.8e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 1 A; 6 C; 0 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Probe to human leukocyte antigen DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                   Claim 19; Page 12; 45pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   927 TTTATCCCTCCTCTTCAT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                             97US-0064997P.
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                                                                 98WO-US023765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAQ12832 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 83.3
les 15; Conservative
                                                                                                                                                   Fresco JR;
                                                                                                                         (UYPR-) UNIV PRINCETON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (revised)
                                                                                                                                                                               WPI; 1999-327425/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-JAN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-JAN-1990;
             W09924622-A1
                                                                 10-NOV-1998;
                                                                                             10-NOV-1997;
                                                                                                                                                   Johnson MD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-OCT-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-JUL-1991
                                     20-MAY-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ12832;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 77
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(EAST) EASTMAN KODAK CO

Probe; human; chromosome 17 triple-helix forming oligonucleotide; genetic disorder; missing chromosome; aneuploidy; chromosome 21; infectious disease; diagnosis; alpha-satellite region; ss.

Homo sapiens

CETUS CORP

WU A L.

(WUAL/) (CLIN-) (JOHJ)

WPI; 1991-224623/31

conjugate.

Chang C,

Wu A,

Query Match Best Local Similarity

Matches

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Gaps

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Indels

3;

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The invention relates to a method for screening retroviral capsid assembly inhibitors. The method involves contacting a chimeric Gag polypeptide comprising a portion of Betaretrovirus domain and another retroviral Gag polypeptide (the Betaretrovirus domain induces the spontaneous assembly of the chimeric Gag polypeptide into viral capsids) with a candidate inhibitor. The method is used to screen candidate agents that may be used to treat retroviral infections especially those caused by human immunodeficiency virus (HIV)-1 and HIV-2. The present sequence is HIV gag CA and NC domain amplifying PCR primer used to generate chimeric constructs of the invention
pathogenic bacteria which is a common cause of bovine mastitis. This spacer region is used in a novel assay to diagnose mastitis in milk by detecting DNA specific for somatic cells which is indicative of inflammation or by detecting DNA specific for a mastitis pathogen which is indicative of infection. This method is particularly useful for the detection of mastitis caused by Streptococcus or Staphylococcus species. The method is rapid, does not involve isolation of calls or bacteria and may allow the causative agent to be identified. (Updated on 25-MAR-2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Screening for retroviral capsid assembly inhibitors, using chimeric Betaretrovirus domain Gag polypeptides, which induce the assembly of Gag polypeptides into viral capsids, useful for treating HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Retroviral capsid assembly inhibitor; chimeric; Gag protein; HIV-1; Betaretrovirus domain; infection; human immunodeficiency virus; PCR; HIV-2; primer; CA domain; NC domain; ss.
                                                                                                                                                                                                                                                                         DB 1; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HIV gag CA and NC domain amplifying PCR primer, MSHIV3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 10 A; 3 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                               Sequence 19 BP; 7 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 13.2; DB 1;
Pred. No. 4e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                Pred. No. 4e+02;
0; Mismatches
                                                                                                                                                                                                                                                                         Score 13.2;
Pred. No. 4e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 2; Page 31; 90pp; English.
                                                                                                                                                                                                                                                                                                                                                               929 TATCCCTCCTCTTCATTG 946
                                                                                                                                                                                                                                                                                                                                                                                                           N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18.1%;
83.3%;
                                                                                                                                                                                                                                                                         18.1%;
83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human immunodeficiency virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-SEP-2001; 2001WO-US030498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-SEP-2000; 2000US-0236273P
                                                                                                                                                                                                                                                                                                                                                                                                         19 TATCCCTCATCTTCGTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      894/c
AAD35894 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                              Best Local Similarity 83.3
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hunter E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FOUND.
                                                                                                                                                              / allow the causati
correct PI field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sakalian M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-APR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UABR-) UAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAD35894;
                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAD35894/
ID AAD3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
    88888888888888
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                                                                                                                                                                                                                                                                                                                              The probe is complementary to a biotinylated primer extension product from the HLA-DQalpha locus. It is attached to a polymeric particle via an ethylene glycol unit linker, to form an insoluble hybrid of probe and primer extension product. The probe is highly efficient at hybridising with the amplified PCR products and provides a rapid and simple means of detecting HLA DNA. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Detecting mastitis by identifying in milk DNA indicating inflammation and bacterial infection - also DNA indicative of antibiotic resistance, provides rapid diagnosis, identifies causative agent and suggests
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Intergenic spacer region, 16S rRNA, 23S rRNA, bovine mastitis, diagnosis, inflammation, infection, PCR primer, 8s.
                                                                                                                                                                                                     Method for detecting HLA DNA - by amplifying the DNA using polymerase chain reaction contacting with probe and detecting by peroxidase-avidin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR primers AAV02643 and AAV02644 are used to amplify the 16S-23S rRNA intergenic spacer region from Staphylococcus epidermidis ATCC 12228, a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S. epidermidis 16S-23S rRNA intergenic spacer region PCR primer 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 13.2; DB 1; Length 19; Pred. No. 4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                       CLINICAL DIAGNOSTIC SYSTEMS INC.
JOHNSON & JOHNSON CLINICAL DIAGNOSTICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 0 A; 5 C; 5 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Forsman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tilsala-Timisjaervi AK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 14; Page 21; 56pp; English
                                                                                                                                                                                                                                                                                           Claim 9; Page 13; 13pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18.1%;
83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97WO-FI000126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ||||| ||||||| || TGGTGTTCTC
                                                                                                             Erlich HA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV02643 standard; DNA; 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                   Method for detecting HLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15; Conservative
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; 0

Gaps

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Indels

Length 19;

(OULU-) OULUTECH LTD.

Synthetic. Staphylococcus

25-MAR-2003 08-APR-1998

V02643/c

WO9732038-A2

04-SEP-1997

26-FEB-1997; 27-FEB-1996; WPI; 1997-448698/41.

Alatossava J,

suitable treatment

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that is functionally equivalent to a gene product expressed in extra-
mbryonic tissue. This method has applications in the treatment of
developmental errors (in vascular growth or haematopoiesis), in an embryo
in utero. The method can also be used in the treatment of conditions
involving an abnormal number of errythroid calls e.g. anaemia,
inflammation, cancer, organ failure, thrombocytopaemia, polycythaemia
vera, erythroleukaemia and also other blood abnormalities such as the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stimulating differentiation of mesodermal cells to haematopoietic or vascular cells - by exposure to an equivalent, specifically hedgehog protein, of product of extra-embryonic tissue, for treating developmental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      assays for determining activity of compounds that modulate haematopoiesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    effects of radiation treatment, infection with human immune deficiency virus. This compound can also be used in the treatment of myocardial ischaemia, and hypervascularisation of genetic or degenerative origin (e.g. ocular neovoscularisation of diabetes, breast cancer etc.), to promote revascularisation for healing wounds such as duodenal ulcers, in the treatment of excessive vascular growth by treating with a hedgehog compound that inhibits activity of the compound and in vitro or in vivo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and vascular growth e.g. for screening libraries, to test growth factors,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cytokines etc., to examine haematopoietic potential of other embryonic tissues, to monitor development of primary embryonic cells and vascular structures, to determine effects of targeted mutations and to study
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV49781-V49806 are PCR primers used in a method of stimulating a population of undifferentiated mesodermally derived cells to undergo haematopoiesis and/or vascular growth by providing them with a compound
                                                                                                                                                                                                                                                                              Mesoderm cell; haematopoiesis; vascular growth; embryo development; treatment; erythroid cell; blood; infection; myocardial ischaemia; hypervascularisation; hedgehog compound; modulator; gene therapy; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          abnormalities in utero, e.g. ischaemia, excessive vascular growth
                                                                                                                                                                                                                                                               Mouse haematopoietic marker PCR primer PECAM-1 (3').
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Belacussoff M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 2; Page 38; 76pp; English.
CTTTGGTCTTTGCCTTTT 929
                                      crriciticarcritar 1
                                                                                                                                           BP.
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                                                                                                                                       AAV49792 standard; DNA; 20
                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           effects of gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (HARD ) HARVARD COLLEGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-447218/38.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9835020-A2
                                                                                                                                                                                                                       02-NOV-1998
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                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
912
                                   18
                                                                                                                                                                               AAV49792;
                                                                                                                                                                                                                                                                                                                                                                                                                              Mus sp.
                                                                                                                        AAV49792/c
                                                                                                   RESULT 80
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DB 1; Length 20;

18.1%; Score 13.2;

Query Match

Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX91991-X97517 represent PCR primers used to amplify open reading frames and other nucleic acid sequences from the genome of Chlamydia pneumoniae (see AAX91990). C. pneumoniae causes respiratory disease such as pneumonia and bronchitis and is thought to be a contributing factor in heart disease, sarcoidosis, sinusitis, purulent ofitis media, erythema nodosum or pharyngitis. The polypeptides encoded by the open reading frames of the C. pneumoniae genome (see AAY34884- AAX35879) can be used in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
                                                                                                                                                                                                                                                                  Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis; sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine; neutralising epitope; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleotides sequences can also be used as immunogenic compositions
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                                                                                                                                                                                                                                         PCR primer used to amplify an ORF of Chlamydia pneumoniae.
               Indels
Pred. No. 4.1e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 8 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Senome sequence of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page 1588; Disclosure; 1912pp; English.
                                             996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         917 GTCTTTGCCTTTTATCCC 934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 82
AAS16412/c
ID AAS16412 standard; DNA; 20 BP.
XX
XAC AAS16412;
XX
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                                                                                                                                                    BP.
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   83.3%;
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                                             949 TTAATGTATCGCTACCAA
                                                                    20 TIAGIGITICGCIGCOAA
                                                                                                                                                    AAX93390 standard; DNA; 20
                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                Chlamydophila pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15; Conservative
 Best Local Similarity 83.3
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 epitope of C. pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1999-357842/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                            03-JUN-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Griffais R;
                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                 AAX93390;
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(first entry)

28-FEB-2003

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sonic hedgehog; desert hedgehog; indian hedgehog; moonrat hedgehog; tiggy winkle hedgehog; haemostatic; orfostatic; anaemia; leukfopenia; chronic inflammatory disease; cancer; organ failure; thrombocytopenia; ischaemia; tumour; diabetes; aging; hypervascularisation; trauma; inflection; neovascularisation; AIDS; acquired immunodeficiency virus; leukaemia; arthritis; polycythemia vera; erythroleukaemia; transgenic mouse; PCR primer; ss.
                                                                                                                                 Haematopoiesis; PECAM-1; mesodermal precursor cell; vasotropic;
                                                                Haematopoietic marker PECAM-1, 3' PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Belaussoff M;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-00021660
(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (HARD ) HARVARD COLLEGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2001041668-A1.
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05-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-NOV-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                           Mus sp
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Stimulating differentiation of mesodermal cells, useful e.g. for treating anemia or ischemia, comprises treatment with functional equivalent of protein expressed in embryonic tissue.

WPI; 2002-017219/02.

Example 2B; Page 15; 41pp; English.

The invention describes a novel method of stimulating a population of undifferentiated mesodermally derived cells to undergo haematopoiesis and/or vascular growth. This involves treating cells with a compound that is functionally equivalent to a gene product expressed in an embryo's extraembryonic tissue e.g the hedgehog family including sonic, desert, indian, moonrat and tiggy winkle, to modulate differentiation and proliferation of mesodermal precursor cells. The method is used to treat developmental errors in vascular growth and haematopoiesis in utero, to modulate disorders associated with an abnormal number of erythroid cells e.g. polycythaemia vera, erythroleukaemia and anaemia (including idiopathic, constitutional or secondary aplastic, or myelodysplastic forms, where induced by virus, chronic inflammatory disease, cancer, organ failure or drugs, or thrombocytopenia) but also leukopenia (caused by radiation, chemotherapy or infections) e.g. leukaemia, AlDS, to treat tissue ischaemia (specifically myocardial) and hypervascularisation associated with genetic or inherited diseases, trauma, infections and aging, or neovascularisation, e.g. in tumours, diabetes, arthritis etc. This sequence is the haematopoietic marker PECM-1 (not defined in the specification) 37 PCR primer, used with 57 PCR primer AAS16411, to demonstrate gastrulation by expression of haematopoietic and endothelial markers described in the method of the invention

Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

18.1%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.1e+02; Indels 0; Mismatches 15; Conservative Local Similarity Query Match Matches

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Gaps

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ABZ21766 standard; DNA; 20 BP. 3Z21766/c SULT 83

ABZ21766;

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                                                                              .ne kinase, enzyme; AIM-1; antisense oligonucleotide; human; tumour; inhibition; ss.
                                                                                                                                                                                                                                                                                                                                                                                                         Antisense oligonucleotide structure and use using serine/threonine kinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     serine/threonine kinase AIM-1 gene. Also described is a human liver cancer (HepG2) cell strain and a Balb/c (mu/mu) mude mouse incoulative liver cancer cell which can be used as models for screening and evaluation of the 12 antisense oligonucleotides. In vitro studies show that the antisense oligonucleotides can effectively inhibit the growth human liver cancer, and have a dose-dependent relationship, and in the mude mouse they can also effectively inhibit the growth of cancer, so they can be used for treating and reducing tumours and its related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABZ21763 to ABZ21774 represent antisense oligonucleotides for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                             Serine/threonine kinase AIM-1 gene antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18.1%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.1e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 9 A; 1 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                          (RADI-) INST RADIOMEDICINE MILITARY MEDICAL ACAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 1 (Claims); 9pp; Chinese.
                                                                                                                                                                                                                                          11-DEC-2000; 2000CN-00134534.
                                                                                                                                                                                                                                                                        11-DEC-2000; 2000CN-00134534.
                                                                               Serine/threonine kinase;
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                                                                                                                                                                                                                                                                                                                                         Lin L, Guan W;
                                                                                                                                                                                                                                                                                                                                                                                                                          AIM-1 gene as target.
                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-733523/80.
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                                                                                                liver cancer;
                                                                                                                               Homo sapiens
                                                                                                                                                                              CN1358732-A.
                                                                                                                                                                                                             17-JUL-2002.
                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                         Wang S,
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936 CCTCTTCATTGGTTTAAT 953

19 CCTCCTCCTTTGTTAAT 2

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ABZ98885 standard; DNA; 20 (first entry) 17-0CT-2003 ABZ98885; RESULT 84 ABZ98885

Η.

Human PDE4A oligonucleotide sequence.

Human; antisense; lung dysfunction, nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiaathmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodiation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.

Homo sapiens.

WO200285308-A2

Pabalan J, Aguilar D;

Katz E,

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Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                     Disclosure; SEQ ID NO 14127; 872pp; English.
                                                                 Nyce JW, Li Y, Sandrasagra A, K
Miller S, Tang L, Shahabuddin S;
                23-APR-2002; 2002WO-US013135.
                                24-APR-2001; 2001US-0286137P.
                                                 (EPIG-) EPIGENESIS PHARM INC.
                                                                                           WPI; 2003-229219/22.
31-OCT-2002
                                                                                                                                     ubiquinone
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The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligomuclectide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nuclectides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction as second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of biquinone or .; 0 lung surfactant in a subject's tissue, or treating bronchoconstriction, ung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO Gaps .. Score 13.2; DB 1; Length 20; Pred. No. 4.1e+02; 0; Mismatches 3; Indels Sequence 20 BP; 0 A; 10 C; 0 G; 10 T; 0 U; 0 Other; at ftp.wipo.int/pub/published_pct_sequences 18.1%; 83.3%;

;0 927 TTTATCCCTCCTCTTCAT 944 TITCITCCICCICITCCI 18 Query Match 18.1 Best Local Similarity 83.3 Matches 15; Conservative Н Q S

ADE43679 standard; DNA; 20 ADE43679; RESULT 85 ADE43679 Ω

29-JAN-2004 (first entry)

Neurodegenerative disease; uPA; SNCG; IDE; KNSL1; LIPA; INFRSF6; Alzheimer's disease; neuroprotective; nootropic; gene therapy; Human KNSL1 sequencing primer, SEQ ID 284. Chromosome 10; PCR; primer; ss.

Homo sapiens

WO2003054143-A2.

03-JUL-2003

25-OCT-2002; 2002WO-US034679.

The present invention relates to a method (M1) for determining a predisposition for or the occurrence of neurodegenerative disease in a subject. The method comprises detecting in a target nucleic acid obtained from the subject the presence or absence of an allelic variant of one or more polymorphic regions of one or more genes selected from uPA (Uckinase plasminogen activator), SNGG (gamma-synuclein), IDE (insulindegrading enzyme), KNSL1 (Kinesin-like protein 1), LIPA (lysosomal acid lypase), and TNFRSFG (Tumour Necrosis Factor Receptor-SFG), where the polymorphic regions is indicative of a predisposition for or more polymorphic regions is indicative of a predisposition for or the cocurrence of neurodegenerative disease. The genes are all located on chromosome 10. M1 is useful for determining a predisposition for or the cocurrence of, and for treatling neurodegenerative disease, particularly Alzheimer's disease. The present sequence is a PCR primer, which was used in the method of the invention. Determining a predisposition for or the occurrence of neurodegenerative disease, e.g. Alzheimer's disease by detecting in a target nucleic acid the presence or absence of an allelic variant of one or more polymorphic Bertram L; ; 0 18.1%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.1e+02; tive 0; Mismatches 3; Indels Tanzi RE, Elliott KJ, Wang X, Ta Sampson AJ, Blacker DL; Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other; Example 3; Page 290; 848pp; English. 949 TTAATGTATCGCTACCAA 966 08-NOV-2001, 2001US-0336929P. 08-NOV-2001, 2001US-0338010P. 09-NOV-2001, 2001US-0338363P. 24-DEC-2001, 2001US-0338363P. 28-MAR-2002, 2002US-0368919P. 2001US-0339525P ΰ NEUROGENETICS INC GEN HOSPITAL CORP Mullin KM, 15; Conservative Velicelebi WPI; 2003-559131/52 Similarity Saunders AJ, 25-OCT-2001; Ď Query Match Local NEUR-) (GEHO) Becker Matches ð

Gaps 3 TGAATGTTTAGCTACCAA 20 g

0;

RESULT 86 ADB42940

ADB42940 standard; DNA; 17 BP. (first entry) (revised) 18-DEC-2003 04-DEC-2003 ADB42940;

Tumour suppression/reversion associated nucleotide #3263.

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

Homo sapiens

WO2003040369-A2

15-MAY-2003.

17-SEP-2002; 2002WO-IB004219.

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New polymorphic variants of the gene encoding Cytochrome P450 polypeptide 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g. arachidonic acid metabolism, cancer or cardiovascular diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           metabolism, cancer or cardiovascular diseases. This sequence represents a primer used to isolate regions of the human cytochrome P450 polypetide 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism (SNP) in that region of different individuals useful in disease diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New polymorphic variants of the gene encoding Cytochrome P450 polypeptide 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g. arachidonic acid metabolism, cancer or cardiovascular diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism; cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy; single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.
                                                                                                                                                                                                                                                         The invention describes a new polynucleotide comprises a polynucleotide:

(a) having any of 101 nucleic acid sequences with 18-19 bp fully defined in the specification; (b) encoding any of seven polypeptides having 7 amino acids, or a polypeptide with 3 amino acids; (c) capable of hybridising to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d) encoding a molecular CYP2C8 variant polypeptide or its fragment. The polynucleotide, gene, vector, polypeptide or antibody is useful for diagnosing or treating a disease, for preparing a diagnostic composition for treating a disease, for preparing a pharmaceutical composition for treating a disease. This disease includes arachidonic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention describes a new polynucleotide comprises a polynucleotide:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17.8%; Score 13; DB 1; Length 19; 86.7%; Pred. No. 4.3e+02; ive 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19 BP; 3 A; 6 C; 3 G; 6 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP detection PCR primer #269.
Brinkmann U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Brinkmann U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
                                                                                                                                                                                                             Example 2; Page 53; 178pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002WO-EP006000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACA98829 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 86.79
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
Sprenger R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sprenger R,
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                                                    WPI; 2003-167344/16.
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  Penger A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Penger A,
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à
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 18% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleot caids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing the actors) the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease can be used for diagnosis and/or prognosis of these diseases. The nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can be useful for treatily useful for treatily useful for treatily used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
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                                                                                                                                                                                                                                New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Pred. No. 4e+
rative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human CYP2C8 SNP detection PCR primer #266.
                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 413; 771pp; French.
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                                                                                                                           Tuijnder M;
                                                                       (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACA98826 standard; DNA; 19 BP.
                     17-SEP-2001; 2001FR-00011981.
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                                                                                                                           Amson R,
                                                                                                                                                                            WPI; 2003-441574/41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
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                                                                                                                           Telerman A,
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Gaps

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(a) having any of 101 nucleic acid sequences with 18-19 bp fully defined in the specification; (b) encoding any of seven polypeptides having 7 amino acids, or a polypeptide with 3 amino acids; (c) capable of hybridising to a Cytochrome P400 polypeptide 2C8 (CYP2C8) gene; (d) encoding a molecular CYP2C8 variant polypeptide or its fragment. The polybrucleotide, gene, vector, polypeptide or antibody is useful for diagnosing or treating a disease, for preparing a diagnostic composition for diagnosing a disease, or for preparing a pharmaceutical composition for treating a disease. This disease includes arachidonic acid metabolism, cancer or cardiovascular diseases. This sequence represents a primer used to isolate regions of the human cytochrome P450 polypetide 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism (SNP) in that region of different individuals useful in disease diagnosis
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17.8%; Score 13; DB 1; Length 19; 86.7%; Pred. No. 4.3e+02;
                                              Pred. No. 4.3e+02;
; Mismatches 1; Indels
Sequence 19 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 1 Other;
                                                             1;
                                                                                              899 CCCTGGTCATTTTCT 913
                                          Local Similaricy
hes 13; Conservative
                                                                                                              CCCTGGYCACTTTCT
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                               Query Match
                                                              Matches
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Gaps ;

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Human HTPL scanning oligonucleotide SEQ ID 4341.
     ABV83095 standard; DNA; 17 BP.
               03-JAN-2003 (first entry)
          ABV83095;
RESULT 89
ABV83095/0
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Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.

Homo

EP1229046-A2.

07-AUG-2002

28-JAN-2002; 2002EP-00001167. 2001WO-US000663 30-JAN-2001;

2001WO-US000664. 2001WO-US000665. 2001WO-US000667. 2001WO-US000668. 2001WO-US000669. 2001US-00864761. 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 23-MAY-2001;

(AEOM-) AEOMICA INC

2001US-0327898P

09-OCT-2001;

Zhan J;

WPI; 2002-676582/73.

Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.

Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.

The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL

Example 2; Page 633; 718pp; English.

Example 2; Page 633; 718pp; English.

The present invention relates to human testis expressed Patched like protein (HTPL, see ARV18759 to ARV18752 and ABB98151 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop

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codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The harded structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumnour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome loppl2.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in thermapy and manufacture of a medicament for treatment or prevention of therapy and manufacture of a medicament for treatment or prevention of such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, Kidney, lung, placenta, prostate, skeletal liver, bone marrow, brain, Kidney, lung, placenta, prostate, clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
human testis expressed Patched like protein; testis; adrenal; liver;
male germ cell development; bone marrow; brain; kidney; lung; placenta;
prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                       17.5%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 4.3e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                            Seguence 17 BP; 10 A; 4 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human HTPL scanning oligonucleotide SEQ ID 4342.
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30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
23-WAX-2001; 2001US-00864761.
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                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                           Similarity
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Local Sim
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                                                                                                                                                                                                                                                                                                             Query Match
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                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 90
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has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-5 (S for short) compared to HTPL-1. (I for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10p12.1 HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in thrap, and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adread, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention

Sequence 17 BP; 9 A; 4 C; 2 G; 2 T; 0 U; 0 Other;

0; Gaps ·, 17.5%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 4.3e+02; ive 0; Mismatches 2; Indels Matches 14; Conservative Best Local Similarity Query Match

91 3T38079 ESULT

ABT38079 standard; DNA; 17 BP ABT38079;

(first entry) 12-JUN-2003

Tumour suppression related human fukutin oligo SEQ ID No 3716.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

Homo sapiens.

WO2003025175-A2,

27-MAR-2003

17-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB

Tuijnder M; Telerman A, Amson R,

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 468; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting,

The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate,

Claim 58; Page 100; 185pp; English.

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identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein the prognosis and acquences of the invention can be used in gene the components.
                                                                                                                                                                                                                                      This polynucleotide sequence represents a tumour suppression numan fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.
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0
                                                                                                                                                                                                                                                                                                                       17.5%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 4.3e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                        Sequence 17 BP; 3 A; 6 C; 1 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human K-Ras DNAzyme substrate #802
                                                                                                                                                                                                                                                                                                                                                                                                 930 ATCCCTCCTCTTCATT 945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABZ60690 standard; RNA; 17 BP.
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06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
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                                                                                                                                                                                                                                                                                                                                                              14; Conservative
                                                                                                                                                                                                                                                                                                                                           Local Similarity
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                                                                                                                                                                                                                                      therapy. This related human
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regumence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the complement, or corresponding RNA, of the nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistence, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment or viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides can be used for diagnosis
                                                                                                                                                                                                  0
bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ6444 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human ribozymes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 fragments of at least 15 consecutive nucleotides of these nucleotides, a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to the isolation of 6327 nucleotide sequences,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and/or prognosis of these diseases. The nucleotides and polypeptialso be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                  0;
                                                                                                                                                   Query Match
Best Local Similarity 43.8%; Pred. No. 4.3e+02;
Matches 7; Conservative 7; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tumour suppression/reversion associated nucleotide #4228.
                                                                                                             G; 0 T; 8 U; 0 Other,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure, Page 526; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                            ADB43905 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                           939 CTTCATTGGTTTAATG 954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                                                                                                 17-SEP-2001; 2001FR-00011981
                                                                                                                Sequence 17 BP; 5 A; 2 C; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-441574/41.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-DEC-2003
04-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                       ADB43905;
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                                                                                                                                                                                                                                                                                                                                                  RESULT 93
ADB43905
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence represents a PCR primer used in the amplification of human HP4 prostaglandin receptor. Transfected cells, containing an HP4 prostaglandin receptor expression vector, can be used to screen for substances that bind to the HP4 receptor, for substances that inhibit ligand binding to the HP4 receptor, for substances that inhibit increased cAMP production in cells pretreated with a phosphodiesterase
                                                                               Gaps
                                                                                                                                                                                                                                                                                                          Human; HP4 prostaglandin receptor; adenylate cyclase; drug screening;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                               Human HP4 prostaglandin receptor PCR antisense primer SEQ ID NO:8,
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                                                  17.5%; Score 12.8; DB 1; Length 17; llarity 87.5%; Pred. No. 4.3e+02; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17.5%; Score 12.8; DB 1; Length 18; 87.5%; Pred. No. 4.5e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA encoding human HP4 prostaglandin receptor - useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seguence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
                          Sequence 17 BP; 1 A; 7 C; 1 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 6; Col 10; 15pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gil DW;
expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ41037 standard; DNA; 18 BP.
                                                                                                                                                                                                   BP
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                                                                                                         930 ATCCCTCCTCTTCATT 945
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AAV12463 standard; DNA; 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Regan JW,
                                                                                                                                                                                                                                                                                                                         cAMP; PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ALLR ) ALLERGAN INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1998-144807/13.
                                                             Local Similarity
hes 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                             05-MAY-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Woodward DF,
                                                                                                                                                                                                                                                      15-MAY-1998
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                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                            AAV12463;
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                                                    Query Match
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Matches
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Matches
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26-JAN-2000

Homo sapiens WO9953101-A1

Synthetic.

13-APR-1999;

21-0CT-1999

28-APR-1998; 13-APR-1998;

Cowsert LM,

Ohasi C,

Identifying

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The invention provides antisense compounds of 8-30 nucleotides that inhibit the expression of human Cellular Inhibitor of Apoptosis-2 (c-IAP-2). The antisense compounds may be used for diagnostics, therapeutics (for modulating the expression of c-IAP-2), prophylaxis (e.g. to prevent or delay infection, inflammation, or tumor formation, as research reagents (e.g. to distinguish between members of a biological pathway) and in kits. Sequences AAZ22103-142 represent phosphorothioate oligonucleotides used for antisense inhibition of cellular inhibitor of
                                                                  Cellular Inhibitor of Apoptosis-2, antisense, diagnostic, therapeutic, c-IAP-2; prophylaxis; infection; inflammation; tumor formation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antisense compounds complementary to Cellular Inhibitor of Apoptosis-2 useful for e.g. diagnostics, therapeutics, and as research reagents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; ss; PCR; HP4; human placental clone number 4; EP2; primer; postseglandin receptor; antiasthmatic; antiinflammatory; bronchopulmonary inflammation; asthma; inflammation; antisense gene therapy; reverse transcriptase PCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17.5%; Score 12.8; DB 1; Length 18; 87.5%; Pred. No. 4.5e+02; ive 0; Mismatches 2; Indels
                       Human c-IAP-2 mRNA inhibiting antisense oligo ISIS #23440.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human HP4 prostaglandin receptor RT-PCR primer #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence:18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                       EJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Ackermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 15; Col 39; 33pp; English.
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                                                                                                                                                                                                                                                                                                    98US-00205144.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-561046/47
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                                                                                                                                                                 Homo sapiens
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                                                                                                                                                                                                            US5958771-A.
                                                                                                                                                                                                                                                         28-SEP-1999,
                                                                                                                                                                                                                                                                                                                                                                                                                                       Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-MAY-2002.
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                                                                                                                                         Synthetic.
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    à
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A method has been developed of defining a set of compounds that modulate the expression of a target nucleic acid (tNA) sequence via binding of the compounds with the tNA sequence. The method comprises generating a library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual compounds with the tNA according to defined criteria. Also described are: (1) a method of defining a set of oligonucleotides (ONS) that modulate the expression of a LNA sequence via binding of the ONS with the tNA sequence comprising generating a library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual ONS with the tNA according to defined criteria; and (2) a method of defining a set of compounds that modulate the expression of a method of defining of the compounds with the tNA. The methods can be used for the generation and identification of synthetic compounds having defined physical, chemical or bloactive properties. Information gathered from assays of such compounds is used to identify nucleic acid sequences that are tractable to a variety of nucleotide sequence-based technologies, e.g. antisense drug discovery and target validation. AAZ40852 to AAZ41220, and AAX52701 to AAX52701 to AAX52701 to Pays2701 to Pays2701 of the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ying compounds which modulate expression of nucleic acids, used to compounds having defined physical, chemical or bioactive
                                          Cellular inhibitor of apoptosis-2 phosphorothioate antisense oligo #29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Brooks DG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                     Identification; genetic target; gene modulation; human; probe; antisense oligonucleotide; phosphorothioate; PCR primer; nucleotide sequence-based technology; antisense drug discovery;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Freier SM,
Vickers TA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 21; Page 101; 264pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         properties, e.g. antisense activity.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Borchers AH,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Baker BF,
                                                                                                                                                          target validation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wyatt JR,
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Les 14; Conserv
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26-NOV-1999

AAZ22131;

SULT 96 XZ22131

Query Match Best Local (Matches

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Gaps

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Mack Strong VE, Stapleton PP,

WPI; 2002-179019/23.

(STRO/) MACK STRONG V (STAP/) STAPLETON P P.

(DALY/) DALY J M.

14-FEB-2001; 2001US-00782936. 15-FEB-2000; 2000US-0182524P.

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human prostaglandin (human placental clone number 4) HP4 receptor, where human prostaglandin (human placental clone number 4) HP4 receptor, where the amino acid sequence of the receptor is encoded by nucleotide sequence contained within an open reading frame of plasmid HS/HP4, American Type Culture Collection (ATCC) accession number 97472. Also included are a mino acid sequence encoded by 18 consecutive nucleotides of a nucleotide sequence region flanked by primers of appearing as ABK88470 and ABK88470 and antibodis an anti-HP4 antibody, and a composition comprising the isolated fragment binds an anti-HP4 antibody, and a composition comprising the isolated fragment binds an anti-HP4 antibody, and a composition comprising the isolated fragment of the human prostaglandin HP4 receptor. The HP4 receptor (which has prostaglandin EP2 receptor pharmacological activity) is useful for determining the specific processes mediated by HP4 receptor and in the development of treatments for bronchopulmonary inflammation and asthma, and in regulating inflammation. HP4 is also useful for and asthma, and in regulating inflammation. HP4 is also useful for in binding assays in particular for identifying HP4 receptor agonist and antagonist. The HP4 fragment is useful in in situ hybridisation and for generating antibodies against HP4 receptor epitopes that allows attagonist. The HP4 fragment is useful in in situ hybridisation and for generating antibodies against HP4 receptor epitopes that allows body fluids, and thus identifying a fragment of HP4 polynucleotide is subtype. A composition comprising a fragment of HP4 polynucleotide is sequence is a reverse transcriptase (RT)-PCR primer used to amplify a region of the HP4 prostaglandin receptor. The HP4 receptor mRNA corresponding to the second extracellular in contractions and expense the remember and expense the reservent expense the reservent expense the expense of the present expense the transcriptes (RT)-PCR primer used to amplify extracellular to the second extracellular to the e
                                                                                                                                                                                                                                   New full length human prostaglandin human placental clone member 4 polypeptide useful in the development of treatments for bronchopulmonary inflammation and asthma, and for regulating inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             extracellular loop and seventh transmembrane domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                        Woodward DF;
                                                                                                                                                                                                                                                                                                                                                              Claim 12; Col 10; 16pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          912 CTTTGGTCTTTGCCTT 927
98US-00019393
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                                                        (ALLR ) ALLERGAN SALES INC.
                                                                                                                                                                             WPI; 2002-572852/61.
                                                                                                                    Gil DW,
   05-FEB-1998;
                                                                                                                        Regan JW,
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Query Match 17.5%; Score 12.8; DB 1; Length 18; Best Local Similarity 87.5%; Pred. No. 4.5e+02; Matches 14; Conservative 0; Mismatches 2; Indels
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ABK15756 standard; DNA; 18 BP
                      (first entry)
                      08-MAY-2002
              ABK15756;
RESULT 98
ABK15756/C
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Prostaglandin receptor EP2 antisense PCR primer DNA sequence.

Human; cyclooxygenase-2; COX-2; PCR; primer; sepsis; pancreatitis; burn; trauma; blood aloss; penetrating injury; septic shock; pneumonia; septicaemia; bacteremia; urinary tract infection; wound infection; drug reaction; systemic inflammatory response syndrome; PGE_2; prostaglandin E_2; receptor; EP2; ss.

US2002006915-A1

Homo sapiens

17-JAN-2002

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The present invention relates to a new method of treating a patient at risk for systemic inflammatory response syndrome. The method involves administering a selective cycloxygenase-2 inhibitor or a drug which stimulates at least one prostaglandin E 2 (FGE 2) receptor or a drug which stimulates at least one prostaglandin E 2 (FGE 2) receptor or a drug which interferes with binding of PGE 2 to at least one of PGE 2 which interferes with binding of PGE 2 to at least one of PGE 2 copystemic inflammatory response syndrome e.g. sepsis, parcreatists, burns, trauma, life threatening blood loss from penetrating injury, or a patient who has undergone surgery, septic shock, infections such as pneumonia, betweenia, uninary tract infections such as pneumonia, copystemic and can also be used for beneficial immune medulation. The inhibitor or the drugs selectively modulate the immune response after traumar, reduce the incidence of infectious complications and improve traumaric injury. The present mucleic acid sequence represents the human prostaglandin receptor EP2 antisense PCR primer that was used in the invention with the EP2 sense PCR primer (ABK15755) for peripheral blood mononuclear cell RNA preparation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; BP prostaglandin receptor; human placental clone number 4; HP4;
adenylate cyclase; chronic asthma; immunosuppression; antiasthmatic; PCR;
                                                                                                                                                                                                                                       Treating a patient at risk for systemic inflammatory response syndrome e.g. trauma involves administering cyclooxygenase-2 inhibitor or a drug.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17.5%; Score 12.8; DB 1; Length 18; 87.5%; Pred. No. 4.5e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                             Example 5; Page 10; 39pp; English.
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98US-00019393.
99US-00267423.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABS57306 standard; DNA; 18 BP
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05-FEB-1998;
12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
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98US-0082614P.
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               US2003083300-A1
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23-NOV-1998;
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                                                 01-MAY-2003
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                            The present invention relates to a gene encoding a novel human EP prostaglandin receptor, referred to as human placental clone number 4 (HP4). Also described is a vector, KS/HP4 (pBluescript HP4 clone), used for the expression of HP4 in enkaryotic cells. The HP4 receptor, when expressed in eukaryotic cells. The HP4 receptor, when their analogues, and stimulating adenylate cyclase activity in response to prostaglandins. The HP4 receptor is useful for studying the pharmacology, cellular distribution, and expression of the HP4 receptor. It is also useful as an antigen to raise antibodies against HP4 receptor epitopes, in binding assays for identifying HP4 receptor agonists and antagonists, and for screening compounds able to bind to the prostaglandin HP4 receptor. A composition comprising an antisense agent able to inhibit or prevent translation of the HP4 receptor in vivo is useful for attenuating the effects of endogenous HP4 receptor agonists in patients having conditions such as chronic asthma or immunosuppression, and for treating the above conditions. The present sequence represents a
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/note= "Phosphorothioate backbone; All cytidine residues
are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human, antisense, cellular inhibitor of apoptosis-2; c-IAP-2; cancer; hyperproliferative condition; apoptosis inhibitor 2; autoimmune disease; API-1; hIAP-1; MIHC; gene therapy; phosphorothioate; ss.
                                                                                               Novel isolated human prostaglandin HP4 receptor polypeptide encoded by plasmid KS/HP4, useful to stimulate adenylate cyclase activity in response to prostaglandins or to raise antibodies against HP4 receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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/note= "2'-methoxyethyl (2'-MOB) nucleotides"
15. .18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "2'-methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17.5%; Score 12.8; DB 1; Length 18; 87.5%; Pred. No. 4.5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human c-IAP-2 antisense oligonucleotide #ISIS #23480.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                  Example 6; Page 5; 12pp; English.
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                                 Woodward DF;
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(UYAR-) UNIV ARIZONA STATE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14; Conservative
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                                                               WPI; 2003-066913/06
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Best Local Similarity
Matches 14; Conserv
                               Gil DW,
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modified_base
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Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-DEC-2003
                                 Regan JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAD60507;
                                                                                                                                                    epitopes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SULT 100
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The invention relates to antisense compounds targetted to a nucleic acid encoding human cellular inhibitor of apoptosis-2 (also known as c-IAP-2, apoptosis inhibitor 2, API-1, hIRP-1 and MIHC) to inhibit its expression. Antisense compounds of the invention are used to induce apoptosis in human cells or tissues to treat diseases or conditions associated with insufficient apoptosis. They are used to treat diseases or conditions associated with c-IAP-2 such as hyperproliferative conditions conditions cancer or autoimmune diseases. The invention is also useful in antisense gene therapy. The present sequence is an antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human biallelic marker downstream amplification primer SEQ ID NO:10295.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound, preferably an oligonucleotide, for inhibiting expression of human Cellular Inhibitor of Apoptosis-2 in human cells clissues, and for treating diseases, such as cancer or an autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 12.8; DB 1;
Pred. No. 4.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 16; Page 22; 34pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               targetted to human c-IAP-2 DNA
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16-JUL-2002; 2002US-00197290.
                                                                          23-SEP-1999; 99WO-US022083.
04-OCT-2001; 2001US-00857299.
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Local Similarity 87.5%;
tes 14; Conservative (
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                                                                                                                                                                                (BENN/) BENNETT C F.
(ACKE/) ACKERMANN E J.
(COWS/) COWSERT L M.
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ÖĽ

Chumakov I;

Blumenfeld M,

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Novel biallelic markers used to construct a high density disequilibrium
                                                         Claim 9; Page 2425; 2745pp; English.
                                             map of the human genome
                            WPI; 2000-013267/01.
     (GEST ) GENSET
                 Cohen D,
                                                                                                                                                                                  Best Loca
Matches
                                                                                                                                                                                                                               RESULT 102
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0, AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AZ27740 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3157, 3227, 3297 and 3367, are not actually given a sequence in the Sequence Listing from the Gaps ., 17.5%; Score 12.8; DB 1; Length 19; 87.5%; Pred. No. 4.6e+02; Live 0; Mismatches 2; Indels Sequence 19 BP; 8 A; 6 C; 3 G; 2 T; 0 U; 0 Other; TTTCTTTGGTCTTTGC 924 Conservative Local Similarity les 14; Conserv present invention 606 Query Match

rrrcrrrggrcargec 3 18

AAF49432 standard; DNA; 15 IGF-I oligonucleotide #392. 30-MAR-2001 AAF49432; AAF49432 QHXX

(first entry)

ВЪ

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scaleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neobascular condition of the retina; ss.

Homo sapiens

28-DEC-2000.

Edmondson SR; Wraight CJ, Werther GA,

WPI; 2001-041421/05.

(MURD-) MURDOCH CHILDRENS RES INST. 21-JUN-2000; 2000WO-AU000693 WO200078341-A1. 21-JUN-1999;

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGFP]-1 receptor, IGF binding protein [IGFP]-2 or IGFBP3), which is capable of inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the ARF45151 and AAF45153- (PS161). The method is useful for ameliorating the effects of psoriasis, inchiposis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, chthyosis, pityriasis, unch as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
                 Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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Pred. No. 4.6e+02;
0; Mismatches 1;
                                                                                                                       Example 8; Page 63; 201pp; English.
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92.9%;
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                                                                                 inflammation.
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Best Local 2
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Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF1, pityriasis, IGF binding protein, IGFBP-2, IGFBP3, inflammation, psoriasis, pilaris, growth factor mediated cell proliferation, ichthyosis, serborrhoea; ruba, keratosis, neoplasia, scaleroderma, wart, skin cancer; sclerotic disease, hypermeovascular condition, hyperplasia, kidney disease, neovascular condition of the retina, ss. IGF-I oligonucleotide #391. Homo sapiens

BP.

AAF49431 standard; DNA; 15

RESULT 103

AAF49431

(first entry)

30-MAR-2001

AAF49431;

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

(MURD-) MURDOCH CHILDRENS RES INST.

99US-0140345P.

21-JUN-1999;

Edmondson SR; Werther GA, Wraight CJ,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

schultz1-899.rng

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The present invention relates to human testis expressed Patched like

CC protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL

CC has two isoforms, with a few single base pair differences between the

two. One of the single base pair changes introduces a premature stop

CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL

CS shares an overall structure organisation with the Patched protein. The

shares an overall structure organisation with the Patched protein. The

CC shared structural features strongly imply that HTPL plays a role similar

CC to that of Patched, and is a potential tumour suppressor. HTPL is

CC important in regulating male germ cell development, and the HTPL gene was

CC mapped to human chromosome loph21. HTPL and in HTPL, and in

CC useful for diagnosing a disorder caused by mutation in HTPL, and in

CC therapy and manufacture of a medicament for treatment or prevention of

CC such disorder associated with decreased expression or activity of human

CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,

CC skeletal muscle or colon function. HTPL proteins and nucleic adents for

CC male infertility and caneer. The present oligonucleotide was used in an

CC example from the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 12.4; DB 1; Length 17;
Pred. No. 5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 8 A; 4 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human HTPL scanning oligonucleotide SEQ ID 4343.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0: Mismatches
Example 2; Page 633; 718pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
33-JAN-2001; 2001WO-US000669.
23-MAX-2001; 2001WG-08006761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABV83097 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-JAN-2002; 2002EP-00001167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2001; 2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               914 TIGGICITIGCCIT 927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14 TIGGICTITICACTI 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AEOM-) AEOMICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EP1229046-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-AUG-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABV83097;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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                                                                                     The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [1GF8]-1.

receptor, IGF binding protein [1GF89]-2 or IGF893), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAF45131 and AAF45153-145161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, seforthoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Parched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17.0%; Score 12.4; DB 1; Length 15; 92.9%; Pred. No. 4.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 1 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human HTPL scanning oligonucleotide SEQ ID 4344.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                               Example 8; Page 63; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABV83098 standard; DNA; 17 BP.
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2001WO-US000668.
2001WO-US000669.
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2001WO-US000665.
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2001US-0327898P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    899 CCCTGGTCATTTC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCTGGTCATCTTC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
23-MAY-2001;
09-OCT-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3V83098/c
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0;

Gaps . 0

1; Indels

schultz1-899.rng

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                                                                  The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABS98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10p12.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                      foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a novel isolated 17 mer nucleic acid sequence,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tumour suppression related human fukutin oligo SEQ ID No 2022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 8 A; 4 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 12.4; DB 1
Pred. No. 5e+02;
0; Mismatches
for treating subjects having defects in HTPL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 269; 720pp; French.
                                     Example 2; Page 633; 718pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABT36385 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-SEP-2002; 2002WO-IB004208.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-SEP-2001; 2001FR-00011978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      914 TTGGTCTTTGCCTT 927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-JUN-2003 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-313353/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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uncleotides from the 17 mers sequence, a sequence with, after optimal consideration, at least 80 % identity to the 17 mers sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, colls containing the colypeptides, vectors containing the nucleic acids, cells containing the colypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in both the polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein charapy. This polynucleotide sequence represents a tumour suppression charapy. This polynucleotide sequence represents a tumour suppression containing the charapy. This polynucleotide of the invention can be used in gene
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given in the specification, a sequence containing at least 15 consecutive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleic acid molecule, Hepatitis C virus, HCV, Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         amberzyme, G-cleaver ribozyme; decoy molecule, aptamer;
HBV reverse transcriptase; Enhancer I region; viral replication;
degenerative, disease state; HBV infection; HCV infection; cirrhosis;
liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 1 A; 2 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HBV hammerhead ribozyme substrate sequence #178.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              17.0%; Score 12.4; DB 1
92.9%; Pred. No. 5e+02;
Live 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACD50661 standard; RNA; 17 BP.
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08-JUN-2001; 2001US-0087478.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
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MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
nes 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hepatitis B virus.
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LEE P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-SEP-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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(PAVC/)
(LEEP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (BLAT/)
(MACE/)
(MCSW/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 107
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ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligomoclectides are useful as (1) as probes and primers for detecting, identifying and/or amplifying nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligomoclectides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                            present invention relates to murine oliqonucleotides (ACC62754-
                                                                                                                                                                                                                                                                                                                                                                                                    specifically cancer but also Alzheimer's disease and schizophrenia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 12.4; DB 1; Length 17;
Pred. No. 5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumour suppression/reversion associated nucleotide #2691.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;
                                                                                                                                             Disclosure; Page 562; 738pp; French.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADB42368 standard; DNA; 17
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                                                                                                 transfected cells.
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    WPI; 2003-333167/31
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Matches 13; Conser
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04-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 109
                                                                                                 and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes. DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HBV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                    Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Murine oligonucleotide associated with tumour supression, SEQ ID 4543.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
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                                                                         Lee P;
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                                                                      Pavco
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                                                                         Morrissey
                                                                                                                                                                                                                                                                                 Example 1; Page 139; 387pp; English.
                                                                      Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  disclosed in the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACC67296 standard; DNA; 17 BP.
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                                                             Macejak D,
Roberts E;
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Best Local Similarity
  DRAPER K.
ROBERTS E.
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(DRAP/) DRAPER (ROBE/) ROBERTS
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                                                                    Blatt L,
Draper K,
                                                                                                                                                                                                                                        infection.
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3SULT 108 3C67296

Matches

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0,
  nucleotides. The nucleotides are used as probes or primers for detecting,
                                                                                                                                                                                                                                                                                   and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                     identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies
                                                                                                                                                                          (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis
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                                                                                                                                                                                                                                                                                                                                                                    expression of the nucleotides.
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BP. ADB40322 standard; DNA; 17 ADB40322; RESULT 110 ADB40322 Δ× Η Χ

Tumour suppression/reversion associated nucleotide #645. (first entry) (revised) 18-DEC-2003 04-DEC-2003

17-SEP-2002; 2002WO-IB004219. WO2003040369-A2. Homo sapiens 15-MAY-2003 diagnosis.

(MOLE-) MOLECULAR ENGINES LAB 17-SEP-2001; 2001FR-00011981.

Tuijnder M; Telerman A, Amson R,

WPI; 2003-441574/41.

New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

Disclosure; Page 107; 771pp; French.

The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides or the complement, or corresponding RNA, of the nucleotides or the nucleotides are used as probes or primars for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and

The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides or the nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleations are aid antisense sequences, of nucleotides involved in tumour

suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours

ö cytostatic, antiviral, neuroprotective, nootropic, neuroleptic, ss; primer, probe, tumour suppression, tumour reversion, apoptosis; virus resistance, transgenic animals, Alzheimer's disease, schizophrenia; or cell degeneration (e.g. Alzheimer's disease or schizzphrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies. Gaps 0; Score 12.4; DB 1; Length 17; Pred. No. 5e+02; 0; Mismatches 1; Indels Fumour suppression/reversion associated nucleotide #976. Sequence 17 BP; 2 A; 4 C; 3 G; 8 T; 0 U; 0 Other; Disclosure; Page 146; 771pp; French. Tuijnder M; expression of the nucleotides. ADB40653 standard; DNA; 17 BP. (MOLE-) MOLECULAR ENGINES LAB 17-SEP-2001; 2001FR-00011981. 17-SEP-2002; 2002WO-IB004219. 17.0%; 92.9%; 903 GGTCATTTTCTTTG 916 Garcarrircirie 14 (first entry) 13; Conservative (revised) relerman A, Amson R, WPI; 2003-441574/41. Query Match Best Local Similarity WO2003040369-A2. Homo sapiens. 18-DEC-2003 04-DEC-2003 15-MAY-2003. diagnosis. ADB40653; RESULT 111 ADB40653/c Matches 888888888888888 à qq

potentially useful for treating diseases associated with abnormal expression of the nucleotides.

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or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 8 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                             expression of the nucleotides.
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Gaps . 0 17.0%; Score 12.4; DB 1; Length 17; llarity 92.9%; Pred. No. 5e+02; Conservative 0; Mismatches 1; Indels Query Match Best Local Similarity Matches 13; Conserv

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SULT 112)B44348

BP. ADB44348 standard; DNA; 17

ADB44348;

(first 18-DEC-2003

Tumour suppression/reversion associated nucleotide #4671.

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;

Homo sapiens.

WO2003040369-A2

15-MAY-2003

17-SEP-2002; 2002WO-IB004219

17-SEP-2001; 2001FR-00011981

(MOLE-) MOLECULAR ENGINES LAB.

Tuijnder M; Amson R, Telerman A,

WPI; 2003-441574/41.

New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related useful e.g. for treatment o polypeptide and antibodies.

Disclosure; Page 578; 771pp; French.

The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides, remember as under stringent conditions with the nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for disapnosis and/or prognosis of these diseases. The nucleotides and polypeptides can be used to screen for their specific interactive molecules,

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Plant sequences for ethylene insensitive loci and hook-less 1 allele(s) - confer disease tolerance and ethylene insensitivity when transformed into
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence is a primer for the A. thaliana EIN2 (ethylene insensitive) loous. When transformed into plants EIN2 genomic DNA, or CDNA sequences (obtd. from the EIN2 locus) confer disease tolerance and ethylene insensitivity, with minimal injury or reduction in the harvest yield of saleable material. The plants with disease tolerance may have extensive levels of infection, but little necrosis and few or no lesions. They may also have reduced necrotic and water soaking responses, and chlorophyll loss may be virtually absent
                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                              ethylene insensitive; transformed plant; disease tolerance;
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                                                                      Length 17;
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                                        10 T; 0 U; 0 Other;
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Pred. No. 5e+02;
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                                                                                                                                                                                                                                                                                                                                                       ethylene insensitivity; primer; ss.
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                                        Sequence 17 BP; 1 A; 2 C; 4 G;
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nes 13; Conservative
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Best Local S
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AAAO1/14; 08-JUN-1999 (first entry) Human anti-angiogenic 16K hPRL DNA fragment #1.

Human, anti-angiogenic; prolactin; placental lactogen; hPL; angiogenesis; growth hormone; hGH; hGH-V; capillary endothelial cell proliferation; placental vascularisation; pregnancy; treatment; andiogenic disease; tumour; inhibitor; malignant; angiofibroma; arteriovenous malformation; arthritis; atherosclerotic plaques; corneal graft neovascularisation; wound healing; proliferative retinopsthy; macular degeneration; trachoma; granulation; glaucoma; ocular; uveitis; fracture; Osler-Weber syndrome; psoriasis; fibroplasia; scleroderma; Kaposi's sarcoma; vascular adhesion; ulcer; leuksemia; reproductive disorder; contraceptive agent; gene therapy; pre-eclampsia; intrauterine growth retardation; placental dysfunction; ss.

fomo sapiens.

WO9851323-A1.

19-NOV-1998.

12-MAY-1998; 98WO-US009691.

13-MAY-1997; 97US-0046394P.

(REGC) UNIV CALIFORNIA.

Weiner RI, Martial JA, Struman I,

Taylor R;

WPI; 1999-045192/04. P-PSDB; AAW92268. New anti-angiogenic peptides - comprise N-terminal fragments of human placental lactogen, human growth hormone, growth hormone variant or human prolactin.

Example 5; Page 55; 87pp; English.

This invention describes novel human anti-angiogenic peptides derived from 10 to 150 consecutive amino acids selected from the N-terminal end from 10 to 150 consecutive amino acids selected from the N-terminal end from 10 to 150 consecutive amino acids selected from the N-terminal end cof human placental lactogen (hpl), human growth hormone (hdf), growth hormone variant (hdf-v), or human prolactin. Such peptides (i) inhibit capillary endothelial cell proliferation and organisation (ii) inhibit least one specific receptor which does not bind an intact full length hdf, hPL, prolactin or hdf-v. The invention also describes a method for diagnosing a probable abnormality of placental vascularisation during pregnancy. The peptides can be used for treating an angiogenic disease in a subject, for inhibiting tummour formation or growth in a patient or for modulating vascularisation of a patient's placenta. In particular, the peptides can be used for preventing or treating an angiogenic disease in a subject, for inhibiting tummour malformation, arthitic such as rheumatoid arthitis, atherosclerotic plaques, corneal graft neovascularisation, delayed wound healing, proliferative retinopathy such as these occurring in haemophilic joints, inappropriate vascularisation in wound healing cut an independent of sears on rectinogathy and and reproductive disorders such as follicular and luteal cysts and choriocarcinoma, retrolental fibroplasia, scleroderma, solid tumours, pyogenic glaucoma, retrolental fibroplasia, scleroderma, solid tumours, two prolactinoma, retrolental fibroplasia, scleroderma, solid tumours, cand choriocarcinoma, retrolental fibroplasia, scleroderma, and reproductive disorders such as follicular and luteal cysts and choriocarcinoma, trachoma, vascular adhesions, chronic varients of mathormal levels of N-terminal fragments of fight, hGH-V, prolactin or hPL can be used in assays for impairment of vascular development associated contributed.

Sequence 18 BP; 10 A; 4 C; 2 G; 2 T; 0 U; 0 Other;

Primer #2 related to fusion gene of trehalose synthase.

(first entry)

23-MAY-2002

ABL41557;

BP

ABL41557 standard; DNA; 18

RESULT 116

ABL4155

GGTCATTGCCTTTT

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Fusion gene; trehalose synthase; ss; PCR

primer.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention relates to a fusion gene of trehalose synthase, fusion enzyme protein and a method for producing trehalose using the same. The trehalose is effectively produced in higher yield using a fusion gene of BWMTSase and BWMThase gene that code trehalose biosynthase. The present sequence represents a primer related to the fusion gene of trehalose
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New fusion gene of trehalose synthase, fusion enzyme protein and method
                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Lim JY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17.0%; Score 12.4; DB 1; Length 18; 92.9%; Pred. No. 5.2e+02; ive 0; Mismatches 1; Indels
 Length 18;
                          Indels
                                                                                                                                                                                                                     Primer #3 related to fusion gene of trehalose synthase.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Lee JS,
Score 12.4; DB 1;
Pred. No. 5.2e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18 BP; 7 A; 3 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                              Fusion gene; trehalose synthase; ss; PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Kim YH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for producing trehalose using the same.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Kim JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 22; 25pp; Korean.
                                                                                                                                          ABL41558 standard; DNA; 18 BP.
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            92.9%;
                                                  907 ATTTTCTTTGGTCT 920
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                                                                                                                                                                                           (first entry)
Query Match 17.0
Best Local Similarity 92.9
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                          Kim G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                        Brevibacterium helvolum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-481666/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                         Kim CH,
Seo HS;
                                                                                                                                                                                                                                                                                                                                                                                                   (CHOI/) CHOI Y D.
                                                                                                                                                                                                                                                                                                                                                                                                               KIMC/) KIM C H.
                                                                                                                                                                                                                                                                                                KR2001010091-A.
                                                                                                                                                                                                                                                                                                                                                   15-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                            15-JUL-1999;
                                                                                                                                                                                           23-MAY-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Choi YD,
Park SS,
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Best Local S
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                                                                                                               RESULT 115
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                                                                                                                              ABL41558,
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The present invention relates to polypeptides that promote neurite growth. The polypeptides contain fibronectin Type III repeats derived from a family of cell adhesion molecules (CAMS). The polypeptides of the invention include the F80, Fn3-5, and Fr4-5 regions of the CAM family convention include the F80, Fn3-5, and Fr4-5 regions of the CAM family convention include the F80, Fn3-5, and Fr4-5 regions of the CAM family convention of neurons of the invention are useful for promoting neurite outgrowth of neuronal cells in vitro e.g. in a cell culture system, or in vivo for treating disorders such as peripheral nerve damage associated with physical or surgical trauma, infarction, bacterial or viral infections, coxin exposure, degenerative disease, malignant disease that affects peripheral or central neurones, or in surgical or transplantation methods or which new neuronal cells from brain, spinal cord or dorsal root in which new neuronal cells from brain, spinal cord or dorsal root the implant and innervation into the recipient tissue, where the diseases include central nervous systems lesions, gliosis, Parkinson's disease, allocated for mouse LICAM cytoplasmic reverse transcriptase (RT)-PCR primer #2 is used with R-PCR primer #1 (AASI6280) to amplify a probe for the cloning of human LICAM cDNA.
            Polypeptide for promoting neurite out-growth useful for treating diseases such as inflammation, Parkinson's disease, trauma, comprises fibronectin type III repeats derived from a family of cell adhesion molecules.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and plasmid - for cleavage of the Hras oncogene for neoplasms including bladder cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                              Example 1; Col 29; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 7; 25pp; English.
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90WO-US006226.
90WO-US007459.
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treatment of
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19-DEC-1990;
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20-MAR-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention relates to a fusion gene of trehalose synthase, fusion enzyme protein and a method for producing trehalose using the same. The trehalose is effectively produced in higher yield using a fusion gene of BWMTSase and BWMTBase gene that code trehalose biosynthase. The present sequence represents a primer related to the fusion gene of trehalose
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Neurite outgrowth; fibronectin Type III repeat; cell adhesion molecule; P80; Fn3-5; Fn4-5; neurone; peripheral nerve damage; trauma; infarction; degenerative disease; malipant disease; antibacterial; central nervous system lesion; virucide; antiparkinsonian; nootropic; neuroprotective; antiinflammatory; mouse; LICAM; RT-PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                           New fusion gene of trehalose synthase, fusion enzyme protein and method for producing trehalose using the same.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17.0%; Score 12.4; DB 1; Length 18; 92.9%; Pred. No. 5.2e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                             Lee JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                             Kim YH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mouse L1CAM cytoplasmic RT-PCR primer #2.
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                                                                                                                                                                                                                                                                             Kim JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 22; 25pp; Korean
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                                                                                                                                     99KR-00028783
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18 BP; 3 A; 5 C; 3
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                                                                                                                                                                                                                                                                             Kim CH, Kim G,
Seo HS;
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                Brevibacterium helvolum
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                                                                                                                                                                                                                (CHOI/) CHOI Y D. (KIMC/) KIM C H.
                                                        KR2001010091-A.
                                                                                                                                     15-JUL-1999;
                                                                                                                                                                             15-JUL-1999;
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                                                                                                05-FEB-2001
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                                                                                                                                                                                                                                                                           Choi YD,
Park SS,
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Matches
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invention, which contain a polymorphic base at position 24 of their invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ77440 represent amplification primers for the biallelic markers. The biallelic markers of the invention bave a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the difficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and 3367, are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                                                           ;
              Ras ribozyme expression plasmids were introduced into BJ cells. G418-resistant stable clones were screened for integration of the ras ribozyme plasmid by PCR analysis of their DNA. This radiolabelled probe was hybridised to the PCR prod. from 100 ng of EJ RNA, EJ PHDeta RNA and EJPHDetaHras ribozyme clones. See also AAQ20196, AAQ20515-16 and W09118913 (AAQ20518-21) and W09118624. (Updated on 25-MAR-2003 to correct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human biallelic marker upstream amplification primer SEQ ID NO:7250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human genome; biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                                                                                                           .;
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                                                                                                                                                                                                                17.0%; Score 12.4; DB 1; Length 19; 92.9%; Pred. No. 5.4e+02; vative 0; Mismatches 1; Indels
                                                                                                                                                                             Sequence 19 BP; 3 A; 4 C; 4 G; 8 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                              917 GTCTTTGCCTTTTA 930
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                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 13; Conserv
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23-NOV-1998;
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                                                                                                                                     PR field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The probe was designed from the sequence of the pTrep330 encoding the T. hyo 39 kD antigen no. 2. It was used for screening of clones prepd. from T. hyo genomic DNA following PCR treatment. See also AAQ11377-Q11409.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Treponema hyodysenteriae antigens - having molecular wt. of 39 K daltons and their DNA codes, and use for preparing vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Initiation of translation sequence; antisense therapy; phosphorothioate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense polyamine-conjugated oligonucleotide to papilloma virus.
                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                   17.0%; Score 12.4; DB 1; Length 19; 92.9%; Pred. No. 5.4e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16.7%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.4e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                            Probe COD 931 specific for T. hyo 39kD antigen gene 2.
           Sequence 19 BP; 9 A; 2 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 8 A; 1 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 38; 84pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             944
                                                                                                                                                                                  AAQ11387 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dragon E, Mccaman M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ВР
                                                                                                                                                                                                                                                                                                                                                                                                             89US-00406535.
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                                                 ilarity 92.9%;
Conservative
                                                                                         917 GTCTTTGCCTTTTA 930
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                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                  Greirigecerria 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MLTE-) ML TECHN VENTURES
                                                                                                                                                                                                                                                                                                      Swine dysentery; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                       (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1991-117317/16.
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                                                 Local Similarity
les 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                            13-SEP-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                       13-SEP-1989;
                                                                                                                                                                                                                                     25-MAR-2003
02-JUL-1991
                                                                                                                                                                                                                                                                                                                                                         WO9104036-A.
                                                                                                                                                                                                                                                                                                                                                                                   04-APR-1991,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14;
                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                             AAQ11387;
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                                     Query Match
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                                                                                                                                                          RESULT 120
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                                                             Matches
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ZXEXEXEX
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1..17
/*tag= a
/mote= "at least one (and preferably all) of the backbone
subunits are composed of amide units, so that the
oligomer consists of the nucleobases attached covalently
to a polyamide backbone"
                                                                                                                                                                                                                                                                 This is a c-myb mRNA target sequence (nucleotide no. 2695) of an enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the development or maintenance of a restenotic condition. The concn. of the ribozyme necessary to effect a therapeutic treatment is lower than that of an antisense oligonucleotide and the specificity of action is higher. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New peptide nucleic acid oligomers hybridisable to cytomegalovirus or papilloma:virus - are stable anti:sense molecules with high affinity for
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                     mRNA - used to treat or prevent cardiovascular diseases or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         peptide nucleic acid, {\tt PNA}, cytomegalovirus, {\tt CMV}, papillomavirus, antiviral, diagnostic, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
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                                                                                                                                                                                                                                                                                                                                                                                                                     16.7%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.4e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ecker DJ,
                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 2 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Peptide nucleic acid targetting HPV genome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mirabelli CK,
                                                                                                                                                                     Enzymatic RNA molecules which cleave inflammatory, arthritic, stenotic or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                   Claim 3; Page 20; 65pp; English.
92US-00989848.
92US-00989849.
93US-00008895.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
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                                                                   (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         910 TICITIGGICTITGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 recrarecreracer
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Les 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Crooke ST,
                                                                                                 Draper KG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PHARM INC
                                                                                                                                    WPI; 1994-048853/06.
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misc_feature
                                                                                                 Sullivan SM,
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   07-DEC-1992;
                 07-DEC-1992;
                                 19-JAN-1993;
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                                                                                                                                                                                                      conditions.
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AAT01734
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Matches
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                                                                                               /*tag= a
/mod_base= OTHER
/note= "5'-deoxy-5'-(diphenylimidazolin-2-yl) thymidine"

    target TAT region

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A phosphorothioate oligonucleotide able to hybridise to Papilloma virus initiation of translation sequence was synthesised. The 5' thymidine derivative was conjugated with a polyamine, pref. tris(aminobuty1) amine. The resulting oligonucleotide analogue has enhanced cellular uptake and is less susceptible to nuclease activity than standard oligonucleotides. It can be used in anti-sense therapy. See AAQ21836-Q21842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Specific; cleavage; target RNA; protein; prophylaxis; expression; inhibitor; inhibition; ribozyme; treatment; prevention; psoriasis; asthma; inflammatory diseases; restenosis; cardiovascular condition;
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                                                                                                                                                                                                                                                                                                                                                                                                   New poly-amine conjugated oligo-nucleotide analogues - of HIV and portions of Herpes and papilloma genome(s).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Enzymatic RNA molecule c-myb mRNA target sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 2 A; 8 C; 0 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 3; Page 17; 26pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         929 TATCCTCCTCTTCATT 945
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92US-00987132
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82.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hypertension; arthritis; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 14; Conservative
                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARMA INC
                                                                                                                                                                                                                                                                                                                                     Guinosso CJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised)
 nuclease resistance;
                                                                                                                                                                                                                                                                                                                                                                  WPI; 1992-080013/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                  Key
modified_base
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07-DEC-1992;
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                                                                                                                                                                   WO9202531-A
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                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ57302;
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1Q57302
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0;

Claim 56; Page 129; 305pp; English.

WPI; 1999-591315/50. 24-MAR-1999; 07-OCT-1999. AAA18977; Matches RESULT 124 AAA1897

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New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5 untranslated region, intron/exon (I/B) junction or coding sequence of cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or hybridisable to the E, E2, E4, E5, E7, L1 or L2 reading frames of a papillomavirus. The PNAs can be used to target RNA and single stranded DNA (SEDNA) to produce antisense-type gene regulation moleties. Hence they may be used therapeutically for modulating cytomegalovirus and papillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which a first PNA strand binds with RNA or ssDNA and a second PNA strand binds with the resulting double helix or with the first PNA strand binds with the distance of the strand charge and are water soluble, which featiliates cellular uptake. Futher, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by proceases. The present sequence targets a portion of the papillomavirus
single stranded DNA, used for treating infections.
                                                                                                                               Claim 10; Page 52; 65pp; English
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; 0 Score 12.2; DB 1; Length 17; Pred. No. 5.4e+02; 0; Mismatches 3; Indels Sequence 17 BP; 2 A; 8 C; 0 G; 7 T; 0 U; 0 Other; ; 929 TATCCTCCTCTTCATT 945 1 rerecarecrerreacr 17 16.7%; 14; Conservative Query Match Best Local Similarity

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Gaps

Human TIE-2 substrate sequence SEQ ID NO:2203. AAA18977 standard; RNA; 17 BP 19-JUN-2000 (first entry)

Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidabetic; ophthalmologic; antiniflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; veruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; ss.

Homo sapiens

WO9950403-A2

98US-0079678P. 27-MAR-1998;

99WO-US006507.

(RIBO-) RIBOZYME PHARM INC.

Mcswiggen JA; Coeshott C, Jarvis T, Pavco PA, Roberts E,

Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.

(RIBO-) RIBOZYME PHARM INC

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl contact an integrin subunit beta 3 gene, an integrin subunit beta 3 gene, and AAA1168 to AAA15650 and AAA17622 represent ribozyme sequences for ARA1963 to AAA1963 to AAA1968 represent their corresponding target sequences; AAA19154 represent ribozyme sequences for Tie-2, and AAA1936 to AAA1963 and AAA21501 to AAA21501 to AAA21501 to AAA21501 co AAA21501 and AAA21501 and AAA21501 and AAA21501 and AAA21501 and AAA21501 to AAA2168 to AAA21680 and AAA21680 to AAA21680 and AAA22476 to AAA23343 to for integrin subunit beta 3, and AAA22476 to AAA23343 to stoping a sequence for integrin subunit beta 3, and AAA22476 to AAA23343 to stoping a sequence contraction are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNY, contraction subunit beta 3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARNO), inflammation, and arthritis, as well as encowascular glaucoma, myopic degeneration, psecriasis, verruca vulgaris, and other syndrome, Kippel-Trenaunay-Weber spidcome, obler-Rendu syndrome, sincerin subunit alpha-6 to the result of the syndrome stains, sturge Weber syndrome, sincerin subunit alpha-6 to the levels of ARNI, Tie-2, integrin subunit alpha-6 to the levels of ARNI, tie-2, integrin subunit alpha-6 to the syndrome stains, there are some stains and others. 0 Gaps .; 0 16.7%; Score 12.2; DB 1; Length 17; 41.2%; Pred. No. 5.4e+02; Live 7; Mismatches 3; Indels integrin subunit alpha-6, or integrin subunit beta-3 Sequence 17 BP; 3 A; 7 C; 0 G; 0 T; 7 U; 0 Other; 924 CCTTTTATCCCTCCTCT 940 1 CAUJUMAUCCCUCACCU Best_Local Similarity 41.2 Matches 7; Conservative Query Match $\overset{\circ}{\times} \overset{\circ}{\vee} \overset{\circ}$ ò

Human B-raf substrate nucleotide position 1605. AAV93545 standard; RNA; 17 BP (first entry) 18-FEB-1999 AAV93545; 125 AAV93545

Human, c-raf, A-raf, B-raf, hammerhead ribozyme, hairpin ribozyme, target, substrate; catalyst, modulation, expression, Raf gene, delivery; screening; identification, synthesis, deprotection; purification; cancer; inflammation, psoriasis, non-heatic ascites; infection; genetic drift; restenosis; rhumatoid arthritis; ss. 98WO-US009249. 97US-0046059P. 97US-0049002P. 97US-0056808P. 97US-0061321P. 97US-0061324P. 97US-0064866P. 97US-0068212P. Homo sapiens WO9850530-A2 05-MAY-1998; 12-NOV-1998 09-MAY-1997; 09-JUN-1997 03-JUL-1997 22-AUG-1997 02-OCT-1997 02-OCT-1997 05-NOV-1997

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A method has been developed for the identification of a nucleic acid capable of modulating a process in a biological system. The method comprises: (a) introducing into the system a random library of nucleic acid catalysts (NAC) having a substrate binding domain (SBD), comprising a random sequence, and a catalytic domain (CD); and (b) identifying NAC in systems where modulation has occurred and/or determining the sequence of at least part of the SBDs in such systems. Nucleic acid molecules with endonuclease activity and catalytic activity, from the present invention, are used to modulate gene expression in plant and mammalian cells and to cleave target nucleic acid, particularly for treating systemic diseases caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic ascites and infection. They may also be used to detect genetic drift and mutations in diseased cells and to determine craf RNA. Specifically NACs with RNA-cleaving activity that modulate expression of the Raf gene used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or generally any condition associated with the level of c-raf. Introduction of sugar/phosphate modifications increases stability against nuclease and activity. AAV99922 to AAV33877 represent NACs that can be used in the method, specifically for modulating the expression of a Raf gene
                                                                                                                                                                                                                                        Identifying new catalytic nucleic acid that modulates selected processes especially ribozymes that cleave Raf RNA for treating cancer, restenosis, and also new ribozymes and modified nucleoside triphosphates used as antiviral agents and synthons.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis; allels specific ollogonucleotide; ASO; reduced complexity genome; RCG; genomic classification; identification; DNA fingerprinting; cumour characterisation; hybridisation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human genomic SNP allele specific oligonucleotide SEQ ID NO:259.
        Bellon L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                  Burgin A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16.7%; Score 12.2; DB 1; Length 17; 47.1%; Pred. No. 5.4e+02;
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        Kisich K,
Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Thompson J, Workman CT, Beaudry A, Sweedler D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 2 A; 6 C; 3 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MASI ) MASSACHUSETTS INST TECHNOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 177; Page 169; 259pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               933 CCTCCTCTTCATTGGTT 949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 ccuacucucaugggcu 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0101757P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ilarity 47.1%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                    WPI; 1999-009494/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
Matches 8; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200018960-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-SEP-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4A36202,
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Charest A;

Housman DE,

Jordan B,

Landers JE,

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                                                                                                                                              A method has been developed for detecting the presence or absence of a single nucleotide polymorphism (SNP) allele in a genomic sample. The method comprises preparing a reduced complexity genome (RGG) from the genomic sample and analysing the RCG for the presence or absence of a SNP allele. The method can be used to characterise a tumour, to generate a genomic pattern for an individual genome or to generate a genomic classification code for a genome. The method can be used to assess whether a subject is at risk for developing a disease or to identify a set of SNP alleles associated with a disease. The method can also be used to perform linkage analysis. AAA35944 to AAA35947 represent sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                              Detection of single nucleotide polymorphisms in genomes by prepara and analysis of reduced complexity genomes, useful for genotyping, fingerprinting and determining allele frequency of SNPs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Szymkowski DE;
                                                                                                                                                                                                                                                                                                                           in the exemplification of the present invention. AAA35948
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                                                                                                                                                                                                                                                                                                                                                                                                              Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  3; Indels
                                                                                                                                                                                                                                                                                                                                             AAA36632 represent nucleotide sequences containing SNPs
                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 8 A; 3 C; 4 G; 2 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                Score 12.2; DB 1;
Pred. No. 5.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human CLCA1 gene enzymatic nucleic acid #790.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                 Disclosure; Page 61; 111pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 4; Page 70; 152pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-AUG-2000; 2000US-0224383P.
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82.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM (SYNT ) SYNTEX USA LLC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-217145/27.
                WPI; 2000-293181/25
                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THOMPSON J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200211674-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, chence, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetyloysteine and mucokinetic agents. The mucleic acids of the invention are also used as diagnostic tools to examine genetic drift and muteations within diseased cells or to detect the presence of CLCA1 RNA in a cell. This sequence represents an
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 52.9%; Pred. No. 5.4e+02;
Matches 9; Conservative 5; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17 BP; 3 A; 7 C; 1 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 930 ATCCCTCCTCTTCATTG 946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
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human fukutin; ds

Cytostatic, virucide, neuroprotective, nootropic, neuroleptic, gene chip, antisense, sense, tumour, cell degeneration, cancer, Alzheimer's disease, schizophrenia, protein chip, gene therapy, tumour suppression;

Homo sapiens

WO2003025175-A2. 27-MAR-2003

17-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB.

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Tuijnder

felerman A, Amson R,

WPI; 2003-313353/30.

isolated nucleic acid, useful for treating viral diseases associated h tumors and cell degeneration, also related polypeptides, antibodies and transfected cells. with

Disclosure; Page 716; 720pp; French.

given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic The invention relates to a novel isolated 17 mer nucleic acid sequence,

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acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for disagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic acid molecule, Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; bNAzyme; inozyme; zinzyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatcocallular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                     Score 12.2; DB 1; Length 17; Pred. No. 5.4e+02;
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                                                                                                                                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                    Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HCV minus strand DNAzyme substrate sequence #195.
                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                    916 GGTCTTTGCCTTTTATC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACD61716 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                     1 GATCTTTGTCTTTTGTC 17
                                                                                                                                                                                                                                                                                                                      16.7%;
82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAR-2002; 2002WO-US009187.
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08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                       14; Conservative
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Roberts E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hepatitis C virus.
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DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ROBERTS E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAVCO P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-SEP-2003
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Draper K,
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(MCSW/)
(MORR/)
(PAVC/)
(LEEP/)
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(BLAT/)
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(ROBE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 129
                                                                                                                                                                                                                                                                                                                                                       Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV DNAzyme or minus strand DNAzyme sequences disclosed in the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                         Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tumour suppression/reversion associated nucleotide #4222.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 7 A; 5 C; 4 G; 0 T; 1 U; 0 Other;
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                                                                                                                                                                                                                       Claim 1; Page 278; 387pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900 CCTGGTCATTTTTTG 916
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 ccrecrcerrarcrers 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-SEP-2001; 2001FR-00011981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADB43899 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-441574/41.
WPI; 2003-229207/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
nes 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2003040369-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-DEC-2003
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                                                                                                                                                  infection.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    invention
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Best Local S:
Matches 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            )B43899
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fragments of at least 15 consecutive nucleotides of these nucleotides, a fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides or the nucleotides are used as probes or primers for detecting, identifying quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour reversion, apoptosis and or viral resistence, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Altheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, expression of the nucleotides associated with abnormal expression of the nucleotides.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHELP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein; NHELP1; passive replacement therapy; vaccine; diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human Na/H exchanger-like protein 1 gene oligonucleotide #450.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16.7%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.4e+02; ive 0; Mismatches. 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 3 A; 3 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 2; SEQ ID NO 490; 468pp; English.
                                        Disclosure; Page 525; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              903 GGTCATTTTCTTTGGTC 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GATCATTTTCTTGGGAC 17
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23-MAY-2001; 2001US-00864761.
21-DEC-2001; 2001US-0343331P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-JAN-2002; 2002EP-00001160
polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADC04003 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-DEC-2003
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schultz1-899.rng

Page 83

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The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELPI). The NHELPI nucleic acid molecule, NHELPI polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELPI nucleic acid molecule, NHELPI polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELPI. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELPI. The NHELPI nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                           spanning the sequence of the human NHELP1 gene (ADC03514)
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Gaps
                                                                 0;
                               16.7%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.4e+02; Live 0; Mismatches 3; Indels
Sequence 17 BP; 3 A; 3 C; 2 G; 9 T; 0 U; 0 Other;
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                                                                                           938 TCTTCATTGGTTTAATG
                                                                Conservative
                                               Similarity
                                Query Match
Best Local Simi
Matches 14;
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0;

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ADC04000 standard; DNA; 17
         (first entry)
         18-DEC-2003
      ADC04000;
RESULT 132
 ADC04000
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Human Na/H exchanger-like protein 1 gene oligonucleotide #447.

ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein; NHELP1; passive replacement therapy; vaccine; diagnosis.

Homo sapiens

EP1273660-A2.

08-JAN-2003

30-JAN-2001; 2001WO-US000666. 23-MAY-2001; 2001US-00864761. 21-DEC-2001; 2001US-0343331P. 25-JAN-2002; 2002EP-00001160.

(AEOM-) AEOMICA INC

Gu Y;

WPI; 2003-302724/30

New human sodium-hydrogen exchanger like protein 1 (NHELPI), useful as pasaive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHELPI.

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Example 2; SEQ ID NO 487; 468pp; English.

The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antibody against the protein or its antibody fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with

RESULT 134 AAX61956

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             or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHELP1 gene (ADC03514).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence represents a triple helix forming oligonucleotide that form a triple helix with the double-stranded DNA sequence described in AAX15195. The specification describes novel monomeric compositions which are substituted quinoline or quinazoline-based structures capable of hydrogen bonding specifically with interstrand purine-pyrimidine pairs in a double stranded Watson-Crick DNA molecule to form a triple-helix. (Updated on 25-MAR-2003 to correct PP field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New substd. quinoline and quinazoline cpds. - are monomers for triple helix-forming oligo:nucleotide analogues useful e.g. for treating tumours
 increased expression or activity of human NHELP1. The NHELP1 nucleic acid
                                                                                                                                         Gaps
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                                                                                                       16.7%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.4e+02; ive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3; Indels
                                                                         Sequence 17 BP; 3 A; 3 C; 1 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                         Double-stranded DNA; triple helix; quinoline;
quinazoline-based structure; hydrogen bonding; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18 BP; 0 A; 3 C; 0 G; 15 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                          Triple helix forming oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure, Fig 1; 102pp; English.
                                                                                                                                                                      935 TCCTCTTCATTGGTTTA 951
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                                                                                                                                                                                                                                                                                 BP.
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                                                                                                                                                                                                      TCTTCTTCAATGTTTTA
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Best Local Similarity 82.4
Matches 14; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or viral infection.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-FEB-1995;
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                                                                                                                                                                                                                                                                                                                                            25-MAR-2003
28-APR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                AAX15196;
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                                                                                                                                                                                                                                                   RESULT 133
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The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinases cher than cell-cycle dependent kinases CDK1, FOTA and Cyclin BI. Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for ribhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent Kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDKI, PCNA and Cyclin BI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 2 A; 7 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16.7%; Score 12.2; DB 1;
82.4%; Pred. No. 5.6e+02;
iive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                    Robbins JM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 19; 109pp; English
                                                                                                                                                                                                                                                                                                                                                                                    Barber JR,
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                                                                                                                                                                                             99WO-US028772
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es 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                    Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Welch PJ,
                                                                                                                                                                                                                                                                                                                        (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-412314/35.
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                                                                  WO200032765-A2.
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                                                                                                                              08-JUN-2000
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      Mammalia.
                                                                                                                                                                                                                                                                                                                                                                                    Tritz R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA86643;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               THE STATE OF STATE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    for detecting and/or identifying human papillomavirus (HPV) present in a biological sample. The method comprises amplification of a polynucleic acid fragment of HPV using a 5-primer specifically hybridizing to the A region or B region of the genome of at least one HPV type, and a 3'-primer specifically hybridizing to the C region of at least one HPV type, and hybridisation of the amplified fragments with at least one HPV type, and hybridisation of the mplified fragments with at least one probe capable of specific hybridization with the D region of at least one HPV type. The primers individually or as a combination of 5'-primer and 3'-primer, and the probes are used in the detection and/or identification of HPV present in a biological sample. An isolated HPV polynucleotide, or fragment, can also be used as a primer in a method for detection and/or identification of HPV present in a sample. Identification of the different HPV genotypes may have great clinical and epidemiological importance. The presence of high-risk HPV types is a prognostic marker for development and detection of cervical cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX61849-X61982 and AAX62002-X62093 represent PCR primers and probes used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                         PCR primer; probe; human papillomavirus; HPV; A region; B region; C region; D region; detection; HPV genotype; cervical cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Detection and identification of human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18 BP; 4 A; 0 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ter Schegget
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kleter B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (INNO-) INNOGENETICS NV.
(DELF-) DELFTS DIAGNOSTIC LAB BV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 8; Page 32; 78pp; English.
                                                                                                                                                                                          Type-specific HPV probe SGPP61.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        945 IGGITTAATGTATCGCT 961
   BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97EP-00870136
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Best Local Similarity 82.4%;
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA86642 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 regrrraarcaarrerr
AAX61956 standard; DNA; 18
                                                                                                                              (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Quint W,
                                                                                                                                                                                                                                                                                                                                                                                    Human papillomavirus
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04-DEC-2000

AAA86642;

SULT 135

Van Doorn L,

WO9914377-A2

Synthetic

31-AUG-1999

AAX61956;

14-SEP-1998; 16-SEP-1997;

25-MAR-1999

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Gaps

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82

2 TATCCCTCCTGGTCAGT 18

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Gaps

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AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.

Representative examples of ribozyme recognition sites are given in AAAB415 to AAAB6717. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                 designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDKI, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis;
                                                 The present invention relates to a hairpin or hammerhead ribozyme,
                                                                                                                                                                                                                                    Score 12.2; DB 1; Length 18; Pred. No. 5.6e+02; O; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cdc 2 kinase hammerhead ribozyme recognitoin site #76.
                                                                                                                                                                                                      Sequence 18 BP; 2 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 2 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16.7%; Score 12.2; DB 1;
82.4%; Pred. No. 5.6e+02;
live 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Robbins JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 19; 109pp; English.
               Example 1; Page 19; 109pp; English
                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Barber JR,
                                                                                                                                                                                                                                                                                                         922 TGCCTTTTATCCCTCCT 938
                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                         TGGATTCTATCCCTCCT 17
                                                                                                                                                                                                                                      16.7%;
82.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                           AAA86645 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2000 (first entry)
                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                      restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   restenosis treatment
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-412314/35.
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Best Local Similarity
                                                                                                                                                                                                                                                      Similarity
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                                                                                                                                                                                                                                  Query Match
Best Local Simil
Matches 14; C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAA86645;
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                                                                                                                                                                                                                                                                                                                                                                                            RESULT 137
                                                                                                                                                                                                                                                                                                                                                                                                            AAA86645
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invention, which contain a polymorphic base at position 24 of their mucleotide sequences. AAZ65579 to AAZ740 represent amplification primers for the biallelic markers of the biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyphing studies which are useful in determining the genetic basis for disease states: Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          pharmaceutical agents acting on a disease as well as other treatment.
N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and 3367, are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ65654 to AAZ69578 represent human biallelic markers from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                      Human biallelic marker upstream amplification primer SEQ ID NO:5922.
                                                                                                                                                      Human genome, biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer; amplification; single nucleotide polymorphism; SNP; PCR primer;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 18 BP; 7 A; 0 C; 9 G; 2 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 8; Page 1493; 2745pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chumakov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITATCCCTCCTCTTCA 943
                BP
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98US-0109732P.
                AAZ71566 standard; DNA; 18
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                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          map of the human genome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               (GEST ) GENSET
                                                                                                                                                                                                                                  diagnosis; ss
                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                          21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                23-NOV-1998;
                                                                                                                                                                                                                                                                                                     W09954500-A2
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                                                                                     10-SEP-2001
                                                                                                                                                                                                                                                                                                                                        28-OCT-1999.
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                                                  AAZ71566;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cohen D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              927
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ID AAZ728
XX
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Matches
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AAZ71566,
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14; Conservative

Matches

0;

Gaps

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Length 18; 3; Indels

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diagnosis; ss. Homo sapiens. W09954500-A2

10-SEP-2001

21-APR-1999; 21-APR-1998; 23-NOV-1998;

Cohen D,

28-0CT-1999.

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The invention relates to transforming plastids, comprising transferring a plastid from a cell of a plant to a cell of a genetically distinct plant, introducing a desired nucleic acid into the plastid and transferring the transformed plastid into a cell of a third plant, where the first and transformed plastid are useful for masking a transplastomic plastids are useful for masking a transplastomic plastids are useful for masking a transplastomic plant. The transplastomic plant from is regenerated from cells transformed with the plastid and express a selectable marker gene. Unlike prior art chniques, the method provides easy and efficient plastid manipulation in essentially all crop species, particularly economically important varieties (e.g. potato, tomato, tobacco, pepper and eggplant). The present sequence is a PCR primer which adds a sequence encoding a ribosome binding site form the tobacco roci gene to a promoter fragment from the tobacco los rn gene. This promoter is used to drive expression of an E. coli aminoglycoside 3'-adenyltransferses (ladA) gene when
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Transforming plastids, useful for making transplastomic plants, comprises transferring plastid from one plant to another, transforming plastid with desired nucleic acid and transferring transformed plastid to different
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; skin disease; proritasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MWP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antisoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisicaling; ophthalmological; eratolytic; gene therapy; viral wart; atopic dermatiis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nserted into a transforming plastid and expressed in a transplastomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4232.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16.7%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 2 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 9; Page 15; 30pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      922 IGCCTTTTATCCCTCCT 938
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                                                                                                                                                                                                                                                                            2000US-0191147P.
                                                                                                                                                                                                                     22-MAR-2001; 2001WO-US009318.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                (ICON-) ICON GENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14; Conservative
ribosome binding site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-590174/66.
                                                    Nicotiana tabacum.
                                                                                                          WO200170939-A1.
                                                                                                                                                                                                                                                                         22-MAR-2000;
                                                                                                                                                                 27-SEP-2001.
                                                                                                                                                                                                                                                                                                                                                                                       Kuchuk NV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAH61808;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA265654 to AA269578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AA269579 to AA277440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the pharmaceutical as expenses to and side effects from pharmaceutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3157, 3227, 3297 and 3367, are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                          Human biallelic marker upstream amplification primer SEQ ID NO:7176.
                                                                                                                                                                                         genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                 Human genome; biallelic marker; high density disequilibrium map;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 16.7%; Score 12.2; DB 1; Length 18; Best Local Similarity 82.4%; Pred. No. 5.6e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18 BP; 7 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chumakov I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 9; Page 1761; 2745pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0082614P
98US-0109732P
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                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Blumenfeld M,
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Gaps

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3; Indels

AAS14539;

SULT 140 \S14539

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Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                     Disclosure; Page 381; 408pp; English.
                                                                26-OCT-2000; 2000WO-US029500.
                                                                               99US-0161532P
sickle cell retinopathy; ss
                                                                                                           Robbins JM, Tritz R;
                                                                                             (IMMU-) IMMUSOL INC.
                                                                                                                         WPI; 2001-300427/31.
                                    WO200130362-A2
               Homo sapiens.
                                                                              26-OCT-1999;
                                                  03-MAY-2001
                    Synthetic.
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in Inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, anticlascortheic, antidiabetic, antidiabetic, antidiabetic, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal deteachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn exemplification of the present invention Gaps ; 0 Score 12.2; DB 1; Length 18; Pred. No. 5.6e+02; Sequence 18 BP; 2 A; 7 C; 2 G; 7 T; 0 U; 0 Other; 16.78; 82.4%;

Indels 0; Mismatches Query Match Best Local Similarity 82.4' "**ches 14; Conservative

CP

AAH61811 standard; DNA; 18 BP. AAH61811; RESULT 142 AAH61811 MARAKA MA

10-SEP-2001 (first entry)

recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MWE; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4235. Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;

basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss. atopic dermatitis; actinic keratosis; squamous cell carcinoma;

sapiens. Homo

Synthetic

WO200130362-A2

03-MAY-2001

26-OCT-2000; 2000WO-US029500.

99US-0161532P. 26-OCT-1999;

(IMMU-) IMMUSOL INC.

Tritz R; Robbins JM, WPI; 2001-300427/31.

Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.

Disclosure; Page 382; 408pp; English.

The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme [I] which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, coll-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule [II] comprising a promoter operably linked to a nucleic acid molecule [II] comprising a promoter operably linked to a nucleic acid segment encoding [I). (I) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisisching, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, cytomethopathy, vitreoretinopathy, intraoretinopathy, retinopathy of prematurity and retinopathy, intraoreting proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, and for treating and preventing contributions and viruse of the second o scarring such as keloid, adhesion and hypertrophic or hypertrophic scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention NAMES OF THE PROOF OF THE PROOF

Sequence 18 BP; 2 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

Gaps 0 16.7%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.6e+02; ive 0; Mismatches 3; Indels Query Match
Best Local Similarity 82.4°
Matches 14, Conservative

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AAH61809 standard; DNA; 18 BP. AAH61809; AAH61809

RESULT 143

Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4233

(first entry)

10-SEP-2001

Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;

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US6492173-B1.
                                                                                                                                                                             (ISIS-) ISIS
   Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-DEC-2002.
                                                                       10-DEC-2002.
                                                                                                                                                                                                                Cowsert LM;
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, coll-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating rollferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, aickle cell retinopathy, retinopathy of prematurity and retinal detechment, and for treating and preventing
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0
                                                                                                                                                                                                                                                                                                                                                                                                        Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   or hypertrophic burn
antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antisense inhibition of human cyclin D2 related oligonucleotide #88.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16.7%; Score 12.2; DB 1; Length 18; llarity 82.4%; Pred. No. 5.6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; cyclin D2; diagnostic; therapeutic; prophylaxis; cyclin 2 inhibition; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 scarring such as keloid, adhesion and hypertrophic scar. AAH57577 to AAH62099 represent sequences used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18 BP; 2 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 381; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             938
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                                                                                                                                                                                                                                  26-OCT-2000; 2000WO-US029500
                                                                                                                                                                                                                                                                   99US-0161532P
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                                                                                                                                                                                                                                                                                                                                       Tritz R;
                                                                                                                                                                                                                                                                                                      (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-300427/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
nes 14; Conserv
                                                                                                                                                               WO200130362-A2
                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                   26-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                       Robbins JM,
                                                                                                                                                                                               03-MAY-2001
                                                                                                                          Synthetic.
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Matches
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The invention describes a compound (I) of up to 50 nucleobases in length, which inhibits the expression of Cyclin D2. (I) is useful for inhibiting the expression of Cyclin D2 in cells or tissues in vitro. (I) is thus useful for treating disease associated with Cyclin D2 expression. (I) is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This sequence represents human cyclin D2 inhibition associated oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Detection; probe; contaminant; drinking water; Legionella; coliform; faecal streptococci; soil; sputum; biopsy; urine; food; pharmaceutical; cosmetic; fluorescent in situ hybridisation; FISH; ss.
                                                                                                                                                                                                                                                                                                                                                         Novel antisense compound useful for treating diseases associated with Cyclin D2 expression, comprises an oligonucleotide comprising up to 50 nucleobases in length, which inhibits expression of Cyclin D2 in cells
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 18 BP; 12 A; 4 C; 1 G; 1 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; Col 47-48; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                914 TIGGICTITGCCTTTTA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
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11-DEC-2001; 2001DE-01060666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-JUN-2002; 2002WO-EP006809
01-AUG-2001; 2001US-00920760
                                                                     01-AUG-2001; 2001US-00920760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABX94553 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                             PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Snaidr J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-167479/16.
                                                                                                                                                                                                                                                                                        WPI; 2003-361492/34.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tissues in vitro.
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or

schultz1-899.rng

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Page

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New oligonucleotides, useful for detecting bacteria that may contaminate drinking water, provide quick results for many species in parallel.
                                                                                                                               This invention describes novel oligonuclectide probes used to detect contaminant bacteria that may be present in drinking water. The probes can detect bacteria (especially Legionella, faceal streptococci and coliforms) that may contaminate drinking water in environmental samples (water or soil), clinical samples (sputum, biopsies, urine etc.), in bathing and drinking water and in foods, pharmaceuticals and cosmetics, by in situ hybridisation. The probes combine the advantages of fluorescent in situ hybridisation with those of culture methods. Only a relatively short culture step is required; analysis takes 24-48 hours (contrast many days for conventional methods) and all relevant bacteria can be tested simultaneously. The oligonucleotides can differentiate between species of the same genus and are easy to use, allowing simple
                                                                                     8; Page 13; 53pp; German.
                                                                                  Claim
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0
                            16.7%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.6e+02; ive 0; Mismatches 3; Indels
Sequence 18 BP; 2 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                 932 CCCTCCTCTTCATTGGT 948
                                                                                                                       1 CACTCCTCTTACTTGGT 17
                                                               Conservative
                                              Local Similarity
es 14; Conser
                               Query Match
                                                               Matches
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samples. ABX94532-ABX94578 represent the

analysis of a large number of samples. ABX945 ${\tt 32-AE}$ oligonucleotide probes described in the invention

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Gaps

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Human mitogen-activated protein kinase kinase kinase 2 primer #12.
      ADB84612 standard; DNA; 18 BP
                   (first entry)
                   04-DEC-2003
            ADB84612;
RESULT 146
ADB84612/c
```

antiinflammatory; gene therapy; MEKK2; inflammatory reaction; human; mitogen-activated protein kinase kinase kinase 2; sequencing; ss; MEKK2; primer.

Homo sapiens

US2003064496-Al

03-APR-2003

05-JUN-2002; 2002US-00163811.

05-JUN-2002; 2002US-00163811.

(ATHE-) ATHEROGENICS INC.

Sikorski JA, Cook CK, Whalen AM,

WPI; 2003-540788/51.

useful encoding a human MEKK2 protein, protein, such as regulation of for modulating the activity of the inflammatory reactions. New isolated nucleic acid molecule

Example 1; Page 18; 54pp; English.

The invention describes an isolated nucleic acid molecule comprising a 1857 base pair sequence, given in the specification and encoding a MEKK2 protein or its fragment, or encoding a fusion protein. The nucleic acid molecule is useful in modulating the activity of MEKK2 protein, such as regulation of inflammatory reactions. The MEKK2 protein is useful in identifying a compound that specifically modulates the expression or

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activity of a non-MEKK2 protein, where lack of expression or activity of the MEKK2 protein as compared to the expression or activity of the non-MEKK2 protein indicates that the compound specifically modulates the expression or activity of the non-MEKK2 protein. This sequence represents a sequencing primer used to verify the authenticity of human mitogenactivated protein kinase kinase 2 (MEKK2) clones.
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the
                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genetic transformation of plant plastids, useful for preparing plants that do not contain a selection marker, also vector for
                                                                                                                                                                                                                                                                                                                             plant transformation; plant plastid; autonomous replication; transgenic plant; plastome; tobacco; ss; primer; PCR; rbcL.
                                                                                                     16.7%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.6e+02; ive 0; Mismatches 3; Indels
                                                                             Sequence 18 BP; 8 A; 3 C; 2 G; 5 T; 0 U; 0 Other;
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                                                                                                                             0;
                                                                                                                                                    937 CICITCATIGGITIAAT 953
                                                                                                                                                                                                                                                                                                       PCR primer 3-rbs.
                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Klaus
                                                                                                                                                                                                                                                                                                                                                                                                                                  06-JUL-2001; 2001DE-01032780.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-JUL-2001; 2001DE-01032780.
                                                                                                                                                                         crcerrariegrarari
                                                                                                                                                                                                                                  ADC98654 standard; DNA; 18
                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                              14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ICON-) ICON GENETICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Muehlbauer S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-343941/33.
                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                               Nicotiana tabacum.
                                                                                                                                                                                                                                                                                                                                                                                      DE10132780-A1
                                                                                                                                                                                                                                                                                                     Tobacco rbcL
                                                                                                                                                                                                                                                                                01-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                             16-JAN-2003.
                                                                                                                                                                                                                                                        ADC98654;
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                                                                                                      Query Match
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                                                                                                                  Best Loc
Matches
                                                                                                                                                                                                            RESULT 14
ADC98654
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This invention describes a novel method for genetic transformation of plant plastids. The method comprises providing a plant cell with DNA (I) that (I) contains a sequence that allows autonomous replication in a plant cell (ii) contains at least one desired sequence (II) and (iii) for transcription: (a) is free of transcriptional and/or termination control elements linked to (II) or (b) is free of transcriptional termination control element linked to but includes a transcription initiation control element linked to (II). Replication of (I) is induced and selection made for plants, or cells, that contain genetically transformed plastids. The method is useful for producing transgenic plants (or cells) containing a modified plastome but no selection marker, specifically no antibiotic resistance gene. The vectors used in the process are not species-specific. This sequence represents a PCR primer used to amplify the tobacco (Nicotiana tabacum) rbcL ribosome binding site which is used Sequence 18 BP; 2 A; 7 C; 4 G; 5 T; 0 U; 0 Other; the tobacco (Nicotiana tabacum) rbcL ribosome bi in the construction of the plastid vector plCFB1

Score 12.2; DB 1; Length 18; Pred. No. 5.6e+02; 16.7%; 82.4%; Query Match Best Local Similarity

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Human flt-1 and KDR hammerhead ribozyme target site #34.
28-JUL-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                               Mcswiggen J,
                                                                   Vascular endothelial
                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1997-259017/23.
                                                                                                                                                                                                                                                                                                                                                                             CHIRON CORP.
                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                       WO9715662-A2
                                                                                                                                                                                                                                                                       25-OCT-1996;
                                                                                                                                                                                                                                                                                                         26-OCT-1995;
                                                                                                                                                                                                                                                                                                                         11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-MAR-2000
                                                                                                                                                                                                                                       01-MAY-1997.
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Best Local S:
Matches 6,
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                                                                                                                                                                                                                                                                                                                                                                           (CHIR )
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNN. The oligomuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                         Oligonucleotide primer SEQ ID NO 339556 for detecting SNP TSC0004850.
 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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 Indels
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 3;
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             was obtained in electronic format from Wi
ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Berlin K;
 ;
                                 922 TGCCTTTTATCCCTCCT 938
                                                                                                                                                       ABI39583 standard; DNA; 12 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-APR-2001; 2001WO-IB000713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-APR-2000; 2000DE-01019173
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                                                                2 recenteratectect
                                                                                                                                                                                                                       (first entry)
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Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (EPIG-) EPIGENOMICS
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nes 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                             WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                       22-FEB-2002
 14;
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                                                                                                                                                                                       ABI39583
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\X75700
                                                                                                                     SULT 148
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour anglogenesis, coular diseases, postriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Immunosuppressant inhibitor; transforming growth factor beta; vascular endothelial growth factor; VBGF; interleukin-10; IL-10; cancer; prostaglandin E2; PGE2; immune response; tumour; asthma; Crohn's disease; monocyte chemotactic protein-1; MCP-1; ulcerative colitis; diabetes; glomerulonephritis; acute respiratory distress syndrome; ss; atherosclerosis.
growth factor receptor; VEGF receptor; flt-1; flk-1;
                              KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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Pred. No. 5.4e+02;
6; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 2 A; 3 C; 4 G; 0 T; 6 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 9; Page 192; 218pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                          95US-0005974P.
96US-00584040.
                                                                                                                                                                                                                                                                                                                                                       96WO-US017480.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              / Match 16.4%;
Local Similarity 50.0%;
Les 6; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                   foetal liver kinase 1; ss
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Homo sapiens.

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schultz1-899.rng

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inflammatories for treating e.g. asthma, Crohn's disease, ulcerative colitis, diabetes, glomerulonephritis, acute respiratory distress syndrome and the formation of atherosclerotic plague
                                                                                                                        Composition containing immune stimulant and inhibitor of agent adversely affects the immune response, for treating cancers and
                                                                                              Brysch W;
                                                                              (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
                                                                                             Schlingensiepen R,
                                                                                                                                                       Claim 10; Fig 1; 30pp; English.
                                           99WO-EP004013.
                                                          98EP-00110709
                                                                 98EP-00113974
                                                                                                           WPI; 2000-097470/08
                                                                                             Schlingensiepen K,
Unidentified
             W09963975-A2
                                           10-JUN-1999;
                                                         10-JUN-1998;
                                                                 25-JUL-1998;
                            16-DEC-1999
                                                                                                                                         infections.
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Sequence 15 BP; 0 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

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16.4%; Score 12; DB 1; Length 15; 100.0%; Pred. No. 5.4e+02; ative 0; Mismatches 0; Indels
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                                     Conservative
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Query Match
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Matches 12; Conserv
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Gaps

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Length 15;

AAF48241 standard; DNA; 15 AAF48241; RESULT 151 AAF48241

IGFBP3 oligonucleotide #1661.

(first entry)

30-MAR-2001

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1, pityriasis; IGF binding protein, IGFBP-2, IGFBP3, inflammation, psoriasis, piratis, growth factor mediated cell proliferation, ichthyosis, serborrhoea, ruba, keratosis, neoplasia, scleroderma, wart, skin cancer; sclerotic disease; hypermeovascular condition, hyperplasis, kidney disease; neobascular condition, hyperplasis, kidney disease;

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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Akin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB]-2 or IGFBB]-2 or IGFBB]-3 or IGFBB]-3 or IGFBB]-3 or IGFBB]-4 or IGFBB]-4 or IGFBB]-5 or IGFBB]-5 which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide with a useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, selenderma, warts, banign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina brain or skin, growth factor-mediated malignancies, other selectic
                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention relates to a method for ameliorating the effects
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16.4%; Score 12; DB 1; Length 15; 100.0%; Pred. No. 5.4e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 2 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                 Edmondson SR;
                                                                                                                                                                                           (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                         Example 7; Page 55; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     vessels or any other hyperplasia
                                                                                                                21-JUN-2000; 2000WO-AU000693
                                                                                                                                                       99US-0140345P
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                                                                                                                                                                                                                                 Werther GA,
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                                                                                                                                                                                                                                                                      WPI; 2001-041421/05
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                                      WO200078341-A1
                                                                                                                                                     21-JUN-1999;
                                                                                                                                                                                                                             Wraight CJ,
                                                                            28-DEC-2000.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
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AAF48238 standard; DNA; 15 BP (first entry) CCCTCCTCTTCA 12 30-MAR-2001 AAF48238; RESULT 152 AAF48238 g

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Antisense therapy, antiproliferative; antinflammatory, antipsoriatic, cytostatic, dermatological; cardiant; virucide, ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGFP-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pinatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatosis; neoplasia; sclaroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

IGFBP3 oligonucleotide #1658.

Homo sapiens

WO200078341-A1

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skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factors [IGF]-1 inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F4516). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborthoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperplasia
                                                                                                                                                                                                       Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor, IGF-1; pityriasis; IGF binding protein, IGFBP-2; IGFBP3; inflammathon, psoriasis; pilaris, growth factor mediated cell proliferation, ichthyosis; serborrhoea; ruba, keratosis; neoplasia; scleroderma, wart, skin cancer; sclerotic disease; hypermeovascular condition, hyperplasia, kidney disease; neobascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to a method for ameliorating the effects of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16.4%; Score 12; DB 1; Length 15; 100.0%; Pred. No. 5.4e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 1 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                      Edmondson SR;
                                                 (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                            Example 7; Page 55; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IGFBP3 oligonucleotide #1660.
99US-0140345P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      932 CCCTCCTCTTCA 943
                                                                                                      Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 100.
es 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14
                                                                                                                                                     WPI; 2001-041421/05.
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                                                                                                                                                                                                                                                                                             inflammation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-MAR-2001
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21-JUN-1999;
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                                                                                                      Wraight
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 154
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, ichthyosis, pityriasis, varte, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor—mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to a method for ameliorating the effects of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IGF binding protein, IGFBP-2; IGFBP3; inflammation, psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 1 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                              Ameliorating the effects of a disorder, UV (ultra-violet) treatment (optional) a
                                                                                                                                                                                                             Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 7; Page 55; 201pp; English.
                                                                                                                                                           (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF48239 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IGFBP3 oligonucleotide #1659.
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                                                    21-JUN-2000; 2000MO-AU000693
                                                                                                         99US-0140345P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               932 CCCTCCTCTTCA 943
                                                                                                                                                                                                             Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                 WPI; 2001-041421/05.
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Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200078341-A1
                                                                                                                                                                                                                                                                                                                                                                                                   inflammation.
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                                                                                                      21-JUN-1999;
                                                                                                                                                                                                             Wraight CJ,
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28-DEC-2000
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Query Match

AAF48239;

Homo

SULT 153

F48239

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Gaps

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Edmondson SR;

Werther GA,

Wraight CJ,

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF] - receptor, IGF binding protein [IGFB] - or IGFBP3], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see ARF5151 and ARF45153-F4516). The method is useful for ameliorating the effects of psoriasis, nothyosis, pityriasis, tuba, pllaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenessis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.
                                                                   Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human flt1 VEGF receptor hammerhead ribozyme substrate #44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 1 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 12; DB 1; Le
Pred. No. 5.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stinchcomb
                                                                                                                                                             Example 7; Page 55; 201pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ressels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16.48;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM INC (CHIR ) CHIRON CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCTCCTCTTCA 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 932 CCCTCCTCTTCA
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                                   WPI; 2001-041421/05
                                                                                                                           inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-OCT-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-JUL-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes nucleic acid molecules which modulate the
                                                                                  The present invention describes nucleic acid molecules which modulate t synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VBCF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples
                                                                                                                                                                                                                                     specific examples
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour anjogenesis; psoriaeis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                    Gaps
- useful for treating e.g. tumour angiogenesis, psoriasis,
                                                                                                                                                                                                                                                                                                                                                                    ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human flt1 VEGF receptor hammerhead ribozyme substrate #45.
                                                                                                                                                                                                                                                                                                                               Length 17;
                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                      of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Escopedo 1;
                                                                                                                                                                                                                                                                                           Sequence 17 BP; 3 A; 3 C; 4 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                             16.4%; Score 12; DB 1; 1 50.0%; Pred. No. 5.9e+02; tive 6; Mismatches 0;
                 rheumatoid arthritis, etc., in a human patient
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stinchcomb D,
                                                     Claim 4; Page 48; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 4; Page 48; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                  Conservative
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                                                                                                                                                                                                                                                                                                                                             Local Similarity
hes 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09715662-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX68750;
                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 156
                                                                                                                                                                                                                                                                                                                                                                    Matches
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Gaps .. 0

Length 15; 0; Indels

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angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Vascular endothelial growth factor receptor; VBGF receptor; flt-1; flk-1; NBCB; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rhematoid arthritis; ocular disease; fms-like; tyrosine kinase 1; kinase insert domain containing receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human flt1 VEGF receptor hammerhead ribozyme substrate #46.
                                                                                                                                                                                                                                              Score 12; DB 1; Length 17;
Pred. No. 5.9e+02;
6; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 4 A; 3 C; 4 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                              Sequence 17 BP; 4 A; 3 C; 4 G; 0 T; 6 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 4; Page 48; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX68751 standard; RNA; 17 BP.
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96US-00584040.
                                                                                                                                                                                                                                          h 16.4%;
Similarity 50.0%;
6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                  915 TGGTCTTTGCCT 926
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CHIR ) CHIRON CORP.
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Best Local Similarity
Matches 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX68751;
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ACC68806), which are associated with tumour suppression, tumour reversion, apoptoosis and virus resistence. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                            Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
                                                                                                                                                                                                                                                           tumour suppression, tumour reversion, apoptosis, virus resistance, viral disease, tumour, cell degeneration, cancer, Alzheimer's disease, schizophrenia, ss.
                                                                                                                                                                                                            Murine oligonucleotide associated with tumour supression, SEQ ID 2419.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    present invention relates to murine oligonucleotides (ACC62754-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human integrin alpha 4 gene antisense oligonucleotide ISIS #24459.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of tumours or cell degeneration,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 3 A; 3 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 313; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  are characterised by development
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                                                                                                               BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                      17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-SEP-2001; 2001FR-00011979.
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                                                                                                               ACC65172 standard; DNA; 17
                                                                                                                                                                            (first entry)
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Best Local Similarity 100.1
Watches 12; Conservative
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915 TGGTCTTTGCCT 926
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uggucuuugccu 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900 CCTGGTCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAZ30575 standard;
                                                                                                                                                                                                                                                                                                                                                          WO2003025176-A2.
                                                                                                                                                                                                                                                                                                                           Mus musculus.
                                                                                                                                                                            01-JUL-2003
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                                                                                                                                             ACC65172;
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                                                                                 RESULT 158
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                                                                                                ACC6517
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Gaps · 0

h Similarity 50.0%; Pred. No. 5.9e+02; Similarity 60.0%; Pred. No. 5.9e+02; 6; Conservative 6; Mismatches 0; Indels

Query Match Best Local Similarity Matches 6; Conserv

schultz1-899.rng

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Human; integrin; antisense; oligonucleotide; inhibition; expression; very late antigen; CD49d; CD29; cell surface; leucocyte; adhesion; ascular endothelial cell; vascular endothelium; migration; inflammation; atherosclerosis; allema; rheumatoid arthritis; tumor; metastasis; circulatory system; autoimmune disease; Grave's disease;
                                                                                                                                                                                                                                                                     Antisense inhibition of integrin alpha4 expression useful for treating inflammatory diseases such as atherosclerosis, allergies, asthma and
                                                   metastasis; circulatory system; autoimmune disease; Grave's disease
Hashimoto's thyroiditis; encephalomyelitis; multiple sclerosis; ss.
                                                                                                                                                                                                                            Condon TP;
                                                                                                                                                                                                                                                                                                                 Example 8; Col 25; 40pp; English.
                                                                                                                                                              98US-00166203.
                                                                                                                                                                                  98US-00166203.
                                                                                                                                                                                                                            Cowsert LM,
                                                                                                                                                                                                      PHARM INC
                                                                                                                                                                                                                                                 WPI; 1999-590416/50.
                                                                                                                                                                                                      SISI (-SISI)
                                                                                   Synthetic.
Homo sapiens
                                                                                                                                                              05-OCT-1998;
                                                                                                                                                                                  05-OCT-1998;
                                                                                                                    US5968826-A.
                                                                                                                                         19-0CT-1999
                                                                                                                                                                                                                            Bennett CF,
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The invention relates to the generation of antisense oligonucleotides targeted to the integrin alpha4 gene (human sequence AAZ30555) which are used for inhibiting expression of the integrin alpha4 mRNA or protein. The oligonucleotides AAZ30556-Z30594 are used to inhibit human integrin alpha4 protein expression. Integrin alpha4 is a component of Very Late Attigen (VLA) 4 (also called alpha4Detal and C04940/C039). VLA-4 is expressed on the cell surfaces of leucocytes and vascular endothelial calls and mediates the adhesion of leucocytes to the vascular endothelium prior to migration into the surrounding tissues. This migration is an essential step in inflammation and hence VLA-4 (and consequently integrin alpha4) is a potential therapeutic target for treating inflammatory diseases and the damaging effects of excessive inflammation. These disorders include atherosclerosis, allergies, asthma, rheumatoid atthritis and tumor cell metastasis (VLA-4 is involved in migration of the tumor cells through the extracellular matrix into the circulatory system). VLA-4 is also involved in a number of autoimmune diseases such as Grave's disease, Hashimoto's thyroiditis, encephalomyelitis (EAE), multiple sclerosis. VLA-4 may also be involved in promoting adhesion (i.e. retention) of hemopoietic stem cells in bone-marrow and in allograft rejection

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Sequence 18 BP; 7 A; 5 C; 4 G; 2 T; 0 U; 0 Other;
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Gaps
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16.4%; Score 12; DB 1; Length 18; 100.0%; Pred. No. 6.1e+02; tive 0; Mismatches 0; Indels
                        Best Local Similarity 100.
Matches 12; Conservative
      Query Match
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901 CTGGTCATTTTC 912
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AAS10237 standard; DNA; 18 BP
AAS10237/

ID AAS1

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XC AAS1

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DT 24-0

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DE AULI
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24-OCT-2001 (first entry)

AAS10237;

Antisense oligonucleotide for human integrin alpha 4, ISIS 24459.

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Integrin alpha 4; antisense; very late antigen 4; VLA4; autoimmune disease; inflammatory disease; rheumatoid arthritis; multiple sclerosis; tumour metastasis; melanoma; asthma; psoriasis; allergy; Grave's disease; Hashimoto's thyroiditis; oligonucleotide; systemic lupus erythematosus; allograft rejection; ISIS 24459; ss.
                                                                                                                                                                                                                                                                                                       "Other= all cytosines are 5-methyl cytosine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mod_base= OTHER
/note= "Other= 2' methoxyethoxy residues"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             methoxyethoxy residues"
                                                                                                                                                                                                                                                                                                                                                                                           'note = "Other = Phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  deoxy residues"
                                                                                                                                                                                                            Location/Qualifiers
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/note= "Other= 2'
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/note= "Other= 2'
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/*tag= a
/mod_base= OTHER
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                                                                                                                                           Homo sapiens.
                                                                                                                                                                   Synthetic.
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US6258790-B1

10-JUL-2001.

99US-00377309. 19-AUG-1999; 98US-00166203. 05-OCT-1998;

(ISIS-) ISIS PHARM INC.

Cowsert LM; Condon TP, Bennett CF,

WPI; 2001-450381/48.

Composition for treating inflammatory and autoimmune diseases, comprises antisense compound targeted to nucleic acid molecule encoding integrin alpha4 and inhibit expression of integrin alpha4.

Example 8; Col 25; 49pp; English.

a procein involved in autoimmune and inflammatory diseases. The invention relates to antisense inhibitors of integrin alpha 4 which target and inhibit expression of integrin alpha 4. The antisense molecules are useful for inhibiting the expression of integrin alpha4 in human cells or tissues, treating an animal having a disease or condition associated with expression of integrin alpha4, e.g., inflammatory disease or condition, autoimmune disease or condition including rheumatory disease or condition, solerosis and tumour metastases, melanoma, asthma, psoriasis, allergy, grave's disease, Hashimoto's thyroiditis, systemic lupus erythematosis and allograft rejection, and diseases or conditions characterised by leukocyte migration into affected tissues, preferably central narvous The sequence is an antisense oligonucleotide targetting human integrin 4, system tissues. The antisense molecules are also useful for reducing the levels of VLA-4 and alpha4beta7 integrin in human cells or tissues, and reducing the adherence of cells of a first type e.g., melanoma cells or lymphocytes, to cells of a second type e.g., endothelial cells, by inhibiting integrin alpha4 expression and thus decreasing adhesion of

Sequence 18 BP; 7 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

Query Match

DB 1; Length 18; 16.4%; Score 12; 1 CCTCCTCTTCAGAGG 15

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AAV48709-886 represent antisense oligonucleotides directed against the ErbB-2 gene. Of these, only oligonucleotides AAV48709-91 resulted in STBB-2 gene. Of these, only oligonucleotides AAV48709-91 resulted in significant reduction in ErbB-2 protein expression, while oligonucleotides AAV48792-886 had little effect. The oligonucleotides exemplify the invention. The specification describes oligonucleotides that can each form three hydrogen bonds to cytosine; do not contain four consecutive mucleotides able to form three H-bonds each to four nucleotides each able to form three H-bonds each to four nucleotides each able to form three H-bonds each to four nucleotides each able to form three H-bonds each to four consecutive cytosines; do not contain two sequences of three consecutive cytosines, and the ratio between residues able to form two H-bonds each oligonucleotides are used to endulate expression of genes, particularly the genes for p53, ErB-2, junB, junD TGF-beta 1 or beta 2 to control proliferation of primary cell cultures (e.g. bone marrow stem, liver or kidney cells, osteoolasts, osteoblasts and/or keratinocytes). The oligonucleotides can also be used to analyse function of proteins (by altering their expression or activity) and therapeutically, e.g. in casses of cancer or (targeting TGF) for stimulating the immune system
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Preparation of antisense oligo:nucleotide(s) which lack long runs of consecutive guanosine or inosine - and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapeutically or to modulate growth of calls in
                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ErbB-2; antisense oligonucleotide; modulate; gene expression; ss.
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                                              Indels
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   Pred. No. 6.1e+02;
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                                              Mismatches
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100.08;
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                                                                                                                901 CTGGTCATTTTC 912
                                          12; Conservative
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       Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EP856579-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAV48734;
                                                                                                                                                                                                                                                                                                         SULT 161
                                          Matches
                                                                                                                                                                                                                                                                                                                                            1748734
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the effects of psoriasis, inthyosis, pityriasis, ruba, plaris, serborthoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a meovascular condition of the retina, disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                    Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-1ke Growth Factor I receptor, IGF-1; pityriasis; IGF binding protein, IGFBP-2; IGFBP3, inflammation, psoriasis; pitaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, keratosis, neoplasia; scleroderma, wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia, kidney disease; neobascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ٠,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16.2%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.8e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 8 A; 2 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 8; Page 81; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        vessels or any other hyperplasia
                                       AAF52178 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-0140345P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-JUN-2000; 2000WO-AU000693
                                                                                                                                                    IGF-I oligonuclectide #3138.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           940 TICALIGGITIAATG 954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15 Trcacretrirraric 1
                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wraight CJ, Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-041421/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                   WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-JUN-1999;
                                                                                                              30-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                         28-DEC-2000,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13;
                                                                           AAF52178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
RESULT 16:
AAF52178/
                                       g
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Gaps

0;

16.2%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.8e+02; ive 0; Mismatches 2; Indels

Query Match Best Local Similarity 86.7 Matches 13; Conservative

933 CCTCCTCTTCATTGG 947

Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

0

1 TTCTCCCCCTCT 15

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The invention relates to a non-naturally occurring gene therapy vector, comprising an inner shell having a core complex containing a nucleic acid and at least one complex forming reagent. The vectors are stable having an improved outer steric layer that provides enhanced target specificity, in vivo and colloidal stability. The vectors are relatively homogeneous and comprise chemically defined species. The vectors demonstrate improved cell entry and intracellular trafficking, permitting enhanced nucleic acid therapeutic activity such as gene expression. The present sequence is that of a peptide nucleic acid for preparation of a NLS moiety coupled nucleic acid. The present sequence is linked to the SV40 large T-antigen nucleic acid.
                                                                                                                                                                                                                                                                                                                                                 /more_ The SV40 large T-antigen NLS sequence is linked to the 5' thymine residue by 2 copies of the 8-amino-3.6-dioxaoctanoic acid linker"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Non-naturally occurring gene therapy vector useful for gene therapy, comprises an inner shell having a core complex containing a nucleic acid and at least one complex forming reagent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "Nucleotides 8 and 9 are separated by 3 copies of
the 8-amino-3.6-dioxaoctanoic acid linker"
                                                                                                                                                                                                                                                                            'note = "C and T are the cytosine and thymine PNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Titmas
                                                                                                                                  Gene therapy vector; cell entry; intracellular trafficking; gene expression; PNA; peptide nucleic acid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Subramanian K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 16 BP; 0 A; 8 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                      Peptide nucleic acid NLS peptide bound DNA 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (NOVS ) NOVARTIS AG.
(NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Puthupparampil S,
tt H, Stanek J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 49; Page 103; 178pp; English
                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                              /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                            OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                         /mod base= OTHER
             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-DEC-2000; 2000WO-EP013300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-00475305
                                                                                                                                                                                                                                                                                                                                               pase=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Woodle M, Cheng C, Puthuy
Yang J, Frei J, Mett H,
             AA166199 standard; DNA; 16
                                                                                                                                                                                                                                                                                              analogues"
                                                                                                                                                                                                                                                  ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NLS sequence (AAM51435)
                                                                                                                                                                                                                                                                                                                            /*tag=
                                                                                                                                                                                                                                            /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag=
                                                                                                                                                                                                                                                                                                                                             /mod_
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                                                                          (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200149324-A2
                                                                                                                                                                                                                   Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-DEC-1999;
                                                                                                                                                                                                                                                                                                             modified base
                                                                                                                                                                                                                                                                                                                                                                                                        modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-JUL-2001
                                                                          28-JAN-2002
                                                                                                                                                                                   Synthetic.
                                             AAI66199;
4AI66199
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Isolated nucleic acid molecule encoding a P-glycoprotein of rhesus monkey, useful in assays for evaluating bioavailability of drugs, as well as for the optimization or discovery of drugs.
                                                                                                                                      gene; ds; P-glycoprotein inhibitor; drug bioavailability; P-glycoprotein transporter-related disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention comprises the amino acid and coding sequence of a rhesus monkey (Macaca mulatta) P-glycoprotein and related P-glycoproteins. The DNA and protein sequences of the invention are useful in assays for evaluating the bioavailability of drugs, as well as the optimisation or discovery of drugs for the treatment of disease associated with P-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              discovery of drugs for the treatment of disease associated with Pagycoprotein transporter activity. The present DNA sequence represents part of the gene encoding the Rhesus monkey P-glycoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ds; interferon regulatory factor; IRF-1; IRF-2; herpes; antiviral; transcription factor; virucide; vaccine; interferon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 16 BP; 3 A; 3 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16.2%; Score 11.8; DB 1;
86.7%; Pred. No. 6.1e+02;
tive 0; Mismatches 2;
                                                                                                                 Rhesus monkey P-glycoprotein gene region #4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zoster virus IRF-1 binding site #25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 40; 103pp; English
                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВЪ
                                                                                                                                                                                                                                                                                19-MAR-2002; 2002WO-US008325.
                                                                                                                                                                                                                                                                                                               19-MAR-2001; 2001US-0277095P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 948 TTTAATGTATCGCTA 962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Trcaargrrrcgcra 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADD07218 standard; DNA; 16
                          16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13; Conservative
                          DNA;
                                                                                                                                                                                                                                                                                                                                                                       Crespi CL, Hanscom SR;
                                                                                                                                                                                                                                                                                                                                           (GENT-) GENTEST CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human herpesvirus 3.
                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-075423/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                           ABT14523 standard;
                                                                                                                                             Rhesus monkey; g
P-glycoprotein;
                                                                                                                                                                                          Macaca mulatta
                                                                                                                                                                                                                       WO200274048-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JAN-2004
                                                                                     03-APR-2003
                                                                                                                                                                                                                                                    26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADD07218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
                                                       ABT14523;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 165
RESULT 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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             ABT1452
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Conservative

Local Similarity ses 13; Conserv

Matches

Query Match

· 0

Gaps

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16.2%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 6.1e+02; ative 0; Mismatches 2; Indels

US2003104356-A1

05-JUN-2003

22-NOV-1999;

Berger SL;

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The present sequence represents the preferred target sequence for an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the human c-myb sequence at the base position indicated in the descriptor line. The c-myb sequence was screened for optimal ribozyme target sites using a computer folding algorithm, and regions of the mRNA which did not cleavage sites were identified. Ribozymes were synthesised and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes cleave by modification to prevent descent semooth muscle cell hyperproliferation in restenosis, especially after coronary angioplasty,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vascular endothelial growth factor receptor; VBGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis,
                                                                                                                                                                                   - cleave RNA produced by e.g. c-myb,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16.2%; Score 11.8; DB 1; Length 17; 46.7%; Pred. No. 6.3e+02; Live 6; Mismatches 2; Indels
                                                                                            Jarvis T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 2 A; 4 C; 5 G; 0 T; 6 U; 0 Other;
                                                                                            Mcswiggen J,
                                                                                                                                                                                 New enzymatic nucleic acid molecules for treating restenosis or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Stinchcomb D,
                                                                                                                                                                                                                                                   Claim 1; Page 77; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
  95US-00373124.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96WO-US017480.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               95US-0005974P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96US-00584040.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 912 CTTTGGTCTTTGCCT 926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |::||:|::||:|
| cuauggucumagccu 16
                                            (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAX69124 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (RIBO-) RIBOZYME PHARM INC.
                                                                                         Х,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-JUL-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 46.74
Matches 7; Conservative
                                                                                       Draper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mcswiggen J,
                                                                                                                                      WPI; 1996-010927/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1997-259017/23.
                                                                                       Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and in cancers
13-JAN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9715662-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAY-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX69124;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to treating viral infection or reactivation comprising contacting an individual with an antagonist of the interaction between a Herpees Simplex virus (HSV) polynucleotide sequence appearing as ADDO7153 and interferon regulatory factor-1 (IRF-1, a transcription factor of the interferon regulatory pathway). Also included are an isolated HSV polynucleotide comprising ADDO7153, a composition comprising for compounds capable of inhibiting specific binding of IRF-1 to a polynucleotide, screening for compounds capable of inhibiting specific binding of IRF-1 to a polynucleotide, screening for compounds capable of agonising or antagonising any compound in IRF-1 and/or interferon of agonising or antagonising any compound in IRF-1 and/or interferon binding site consensus sequence. The method is useful for treating infection or reactivation caused by Herpes virus, e.g., HSV-1 or HSV-2 infection and for cytomegalovirus, Epstein Barr virus and zoster virus infection. The HSV polypeptide and polynucleotides may also be useful as antiviral vaccines. The present sequence represents an identified viral IRF-1 binding site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                           Treating infection or reactivation caused by Herpes virus comprises using antagonist of Herpes Simplex virus polynucleotide sequence and interferon regulatory factor-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human c-myb hammerhead ribozyme target sequence (nt. position 2777)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human; smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb; coronary angioplasty; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 16.2%; Score 11.8; DB 1; Length 16; Best Local Similarity 86.7%; Pred. No. 6.1e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 16 BP; 2 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; SEQ ID NO 66; 53pp; English.
                                                                                                                                                                         (SMIK ) SMITHKLINE BEECHAM CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT81529 standard; RNA; 17 BP.
                                                                                  26-MAR-2002; 2002US-00108164
                                                                                                                             99US-00424348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95WO-US006368
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                   WPI; 2003-801223/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
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Homo sapiens WO9531541-A2.

14-DEC-1997

AAT81529;

SULT 166 T81529

18-MAY-1995; 18-MAY-1994;

23-NOV-1995

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The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, coular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX71275 to AAX75722 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV11892-V11900 are PCR primers used in the identification and isolation of a salt-inducible promoter (SIP) derived from the lactic acid bacterium Lactococcus lactis. Using the SIP, salt can be used as a food-grade inducer in food fermentation processes, e.g. in the production of cheese,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Salt-inducible promoter - derived from lactic acid bacteria, used for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Salt-inducible promoter; lactic acid; food industry; food-grade inducer; fermentation processes; cheese production; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dressings, water-containing spreads, sausages, or sour dough
                                                                                                                                                                                                                                                                                      16.2%; Score 11.8; DB 1; Length 17; 53.3%; Pred. No. 6.3e+02; tive 5; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 2 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                        Sequence 17 BP; 3 A; 8 C; 0 G; 0 T; 6 U; 0 Other;
rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                L. lactis NS3 locus PCR primer NS3-10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 16; 111pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                production of polypeptides in food.
                                 Claim 4; Page 59; 218pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Venema G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV11899 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97EP-00200744
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kok J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ž
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lactococcus lactis.
                                                                                                                                                                                                                                                                                                   Local Similarity
es 8; Conserv
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(UNIL ) UNILEVER
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                                                                                                                                                                                                                                                                                        Query Match
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                                                                                                                                                                                                                                                                                                                        Matches
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Score 11.8; DB 1; Length 17; Pred. No. 6.3e+02;

16.2**%**; 86.7**%**;

Query Match Best Local Similarity

Ledeboer AM

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              expression and/or stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes enzymatic nucleic acid molecules with RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARND), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, por wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and diseases related to the levels of ARNT, Tie-2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic ector; cytostatic; antidiabetic; ophthalmologic; antinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruea vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; ss. Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the invention are used for modulating the synthesis, expression and/or
   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Integrin alpha 6 subunit substrate sequence SEQ ID NO:4372.
   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         integrin subunit alpha-6, or integrin subunit beta-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel ribozymes for modulating the synthesis, of an mRNA encoding an angiogenic factors.
   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 55; Page 190; 305pp; English.
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                                                                                                                                                                                                                                                                      AAA21146 standard; RNA; 17 BP
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                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                        936 CCTCTTCATTGGTTT
                                                                                                                    1 CCGCTTCAATGGTTT
   13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-591315/50.
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                                                                                                                                                                                                                                                                                                                                 AAA21146;
                                                                                                                                                                                                             RESULT 169
   Matches
                                                                                                                                                                                                                                            AAA2114
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Gaps

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verruca vulgaris,

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Matches

Query Match

19-JUN-2000

AAA21147;

SULT 170

A21147

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97US-0046059P.
97US-0049002P.
97US-005171BP.
97US-006132IP.
97US-0061324P.
97US-0064866P.
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                                                                                                                                                                                                                       16.2%;
40.0%;
                                                                                                                                                                                                                                                                                                                                          944 TTGGTTTAATGTATC 958
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV93544 standard; RNA; 17
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Best Local Similarity 40.00
Local 6; Conservative
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02-OCT-1997;
02-OCT-1997;
05-NOV-1997;
19-DEC-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 171
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA1767 and AAA17560 and AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17560 and AAA17623 to AAA18385 and AAA19086 and AAA19154 represent their corresponding target sequences; AAA17685 to AAA19155 to AAA19222 represent their corresponding target sequences; AAA19155 to AAA19252 represent their corresponding target sequences; AAA19155 to AAA19250 and AAA19155 to AAA19250 and AAA19159 to AAA21580 to AAA21501 to AAA21595 represent ribozyme sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and AAA21596 to AAA21475 and AAA2342 represent ribozyme sequence for integrin subunit beta 3, and AAA2342 represent ribozyme sequence for integrin subunit beta 3, and AAA2342 represent ribozymes of the invention are used for modulating the synthesis, expression and/or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatcory; antiarthritic; antipsoriatic; ARMD; dermatcological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma;
                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
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                                                                            16.2%; Score 11.8; DB 1; Length 17; llarity 40.0%; Pred. No. 6.3e+02; Conservative 7; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Integrin alpha 6 subunit substrate sequence SEQ ID NO:4373.
                       Sequence 17 BP; 4 A; 2 C; 4 G; 0 T; 7 U; 0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of an mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 55; Page 190; 305pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                               AAA21147 standard; RNA; 17 BP.
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                                                                                                                                                                                               944 TTGGTTTAATGTATC 958
                                                                                                                                                                                                                             3 UUGGUUUAAUCAAUC 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-591315/50.
                                                                                                    Best Local Similarity
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WO9950403-A2.

Ното

07-OCT-1999

24-MAR-1999; 27-MAR-1998; stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinosethy, age related macular degeneration (ARND), inflammation, and arthritis, as well as

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; c-raf; A-raf; B-raf; hammerhead ribozyme, hairpin ribozyme;
target; substrate; catalyst; modulation; expression; Raf gene; delivery;
screening; identification; synthesis; deprotection; purification; cancer;
inflammation; psoriasis; non-hopatic ascites; infection; genetic drift;
restenosis; rheumatoid arthritis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Identifying new catalytic nucleic acid that modulates selected processes - especially tibozymes that cleave Raf RNA for treating cancer, restenosis, and also new ribozymes and modified nucleoside triphosphates used as antiviral agents and synthons.
neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2,
                                                                                                                                                                                                  Gaps
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Burgin A;
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0
                                                                                                                                                        Length 17;
                                                                                                                                                                                                  2; Indels
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                                                                              integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K,
Parry T, Beigelman L, Mcswiggen JA, Karpeisky A,
Thompson J, Workman CT, Beaudry A, Sweedler D;
                                                                                                                   Sequence 17 BP; 5 A; 2 C; 3 G; 0 T; 7 U; 0 Other;
                                                                                                                                                        Score 11.8; DB 1;
Pred. No. 6.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B-raf substrate nucleotide position 1603.
                                                                                                                                                                                                7; Mismatches
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          cleave target nucleic acid, particularly for treating systemic diseases caused by specific RNA, e.g. cancer, inflammation, psoriaatis, non-hepatic ascites and infection. They may also be used to detect genetic drift and mutations in diseased cells and to determine c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate expression of the Raf gene, are used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or generally any condition associated with the level of c-raf. Introduction activity. ANYO9022 to AAV91877 represent NACs that can be used in the method, specifically for modulating the expression of a Raf gene
are used to modulate gene expression in plant and mammalian cells and to
                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Triplex-forming oligonucleotide; TFO; promoter region; pre-S gene; inhibition; hepatitis B virus; HBV adr subtype; DR region; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Triplex-forming oligonucleotides, useful for, e.g. inhibition of hepatitis B virus (HBV).
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"optional monophosphorylation (claim 2)"
                                                                                                                                                                                                                       0;
                                                                                                                                                                                          16.2%; Score 11.8; DB 1; Length 17; 53.3%; Pred. No. 6.3e+02; ive 5; Mismatches 2; Indels
                                                                                                                                                                 Sequence 17 BP; 3 A; 5 C; 3 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (SHAN-) SHANGHAI INST BIOCHEMISTRY CHINESE ACAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              HBV pre-S gene promoter fragment binding TFO B4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                  AAX32865 standard; DNA; 17
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                                                                                                                                                                                                                      8; Conservative
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                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
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20-MAR-2003
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Matches
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higher. Triplex formation is specifically targeting on the HBV gene expression, DNA replication and reproduction, or to produce (DNA)2:RNA hybrid triplex with target sequence of RNA in stopping RNA reverse transcription, so there is little effect on the human cells. Such olgionucleotides are chemically modified by 3'-terminal monophosphorylation, leading to more significant inhibition due to their higher stability, and the degradation products of the modified oligonucleotides are not toxic to the body. (Updated on 20-MAR-2003 to correct DR field.) (Updated on 27-AUG-2003 to correct DR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TRP Orphan receptor, EAR3/COUP-TF-1, the CATA transcription factor gene, IRF-2 and/or the CATT Displacement Protein (CDP). Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of erythropoietin, granulocyte colony stimulating factor protein and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bnzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                            2; Indels
                                                                                                                                                                                                        Score 11.8; DB 1; Length
Pred. No. 6.3e+02;
0; Mismatches 2; Indels
                                                                                                                                                                            Sequence 17 BP; 6 A; 0 C; 11 G; 0 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hammerhead ribozyme substrate #3657.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 54; Page 139; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                          16.2%;
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                                                                                                                                                                                                                                                                                931 TCCCTCCTCTTCATT 945
                                                                                                                                                                                                                                                                                                                                                                                                     AAF07400 standard; DNA; 17
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Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                              13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             interferon alpha; ss.
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                                                                                                                                                                                                                              Local Similarity
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Matches
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919 CTTTGCCTTTTATCC 933

The invention provides triplex-forming oligonucleotides (TFO) and their modified derivatives. TFO B1-B5 (AAX12865-865) can bind with the promoter region of pre-S gene in inhibition of hepatitis B virus (HBV) adr subtype and TFO B11, B12 and B15 (AAX32868-870) can bind with DR region of HBV. The oligonucleotides are useful for inhibition of HBV and as drug in tracament of hepatitis B. Since the length of the oligonucleotides can be sultably increased, the stability and specificity of the formed triplex DNA with 2 similar homopoly purine/homopoly pyrimidine fragments are

CTTTGCCTTGTGTCC

ABK03416 standard; RNA; 17 BP. (first entry) Human CD20 G-cleaver #31. 12-MAR-2002 ABK03416;

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; b-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

Homo sapiens

Synthetic.

WO200159103-A2.

16-AUG-2001

09-FEB-2001; 2001WO-US004273,

11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 28-FEB-2000; 2000US-0185516P, 06-MAR-2000; 2000US-0187128P.

(RIBO-) RIBOZYME PHARM INC. (BLAT/) BLATT L. (MCSW/) MCSWIGGEN J. (CHOW/) CHOWRIRA B M.

Chowrira BM; Mcswiggen J, Blatt L,

WPI; 2001-607195/69.

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

Claim 30; Page 152; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGCD). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule possessing an NRH motif), a G-leaver (cleaving RNA with a NRN motif) propressing an NRH motif) propressing an NRH wotif) propressing an NRH wotif) propressing an Cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably MG²+. Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma (NHL), bulky low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, mantle-cell lymphoma (MCL), immunocytoma (1MC), small B-cell lymphocytic lymphoma, immunocytoma (1MC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-

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targetting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably Mg^2+. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (MS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modularion of NOGO expression. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOG0; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCI; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy:induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntingcon's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                             16.2%; Score 11.8; DB 1; Length 17; 33.3%; Pred. No. 6.38+02; tive 8; Mismatches 2; Indels
                                                                                                                                                                                                                                                  sequence is a G-cleaver molecule of the invention
                                                                                                                                                                                                                                                                                          Sequence 17 BP; 1 A; 5 C; 2 G; 0 T; 9 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human CD20 Hammerhead ribozyme #135.
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Best Local Similarity 33.3%;
Matches 5; Conservative
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06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                         1 UGAUCUUUGCCUUCU 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABK02836 standard; RNA; 17
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) MCSWIGGEN J.
) CHOWRIRA B M.
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Page 103

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The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down caplustes expression of a neurite growth inhibitor gene (NGGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acid cleaving an RNA molecule DNAzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule opssessing an NCH mocifi), a G-leaver (cleaving RNA with a NGW motif) promise the presence of a divalent cation that is preferably MG<sup>2+</sup>.

Control in the presence of a divalent cation that is preferably MG<sup>2+</sup>.

Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin; s lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, lawlaemia, HIV (human immunodeficiency virus) associated WHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, contacted with a celuce NOGO gene in the presence of a divalent cation that is preferably MG<sup>2+</sup>. Furthermore, the nucleic acid may be contacted with a celuce NOGO gene in the presence of a divalent may further comprise the use of one or more call and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapher.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemctherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      treat central nervous system (CNS) injury and cerebrovascular accident
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence is a hammerhead ribozyme of the invention
                                                         Claim 30; Page 142; 200pp; English.
central nervous system injury.
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.; 0 16.2%; Score 11.8; DB 1; Length 17; 33.3%; Pred. No. 6.3e+02; tive 8; Mismatches 2; Indels Sequence 17 BP; 1 A; 5 C; 3 G; 0 T; 8 U; 0 Other; Conservative Best Local Similarity Matches 5; Conserv Query Match Matches

Gaps

915 TGGTCTTTGCCTTTT 929 3 UGAUCUUUGCCUUCU 17 ें

ABK02837 standard; RNA; 17 BP 12-MAR-2002 (first entry) ABK02837; ABK02837

Human CD20 Hammerhead ribozyme #136.

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; anotropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; human; mumuodeficiency virus; HIV associated MHL; lymphocytic leukaemia; human; immunocytoma; nor.Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human; immunocytoma; INC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Allaheimer; sisches; disease; multiple sclerosis; chemocherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson; disease; multiple sclerosis; harringia; disease; multiple sclerosis; harringia; disease;

Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

Homo sapiens Synthetic

rige inversion of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids molecule which down corrected acids may be enzymatic nucleic acids may be enzymatic nucleic acid graving a an RNA molecule DNAzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA with a NGN triple), a zinzyme (cleaving RNA with a NGN triple), a zinzyme (cleaving RNA with a NGY motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA corporated with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more the cell and treat a patient having a condition associated with the level corporation, all particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, lower and inflammatory architograted NHL, mantle-cell lymphoma (MLL), immunocytoma (IMC), small B-cell lymphoma, cimmunocytoma (MLL), bulky low-grade or follicular NHL, mantle-cell lymphoma (MLL), immunocytoma (IMC), small B-cell lymphoma, cimmunocytoma and inflammatory architograted NHL, mantle-cell corporated with a cell to reduce NGG activity of the corporation and inflammatory architograted with the level of cell and treat a patient having a condition associated with the level of cell and treat a patient having a condition associated with the level of the NoGO series and may further comprise the use of one or more condition and processes of a divalent having a condition associated with the level of the NoGO series of a divalent having a condition associated with the level of the NoGO series of a divalent having a completic acid is used to one or more cell and treat a patient having a complete acid therapies. In particular, the NOGO-Cargetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and states which respond to the modulation of NOGO expression. The present The invention relates to a nucleic acid molecule which down regulates sequence is a hammerhead ribozyme of the invention Sequence 17 BP; 1 A; 5 C; 2 G; 0 T; 9 U; 0 Other; Chowrira BM; Claim 30; Page 142; 200pp; English. central nervous system injury. 11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P. 09-FEB-2001; 2001WO-US004273. RIBOZYME PHARM INC. 3latt L, Mcswiggen J, CHOW/) CHOWRIRA B M. BLATT L. MCSWIGGEN J. WPI; 2001-607195/69. WO200159103-A2 16-AUG-2001. (RIBO-) (BLAT/) (MCSW/)

Gaps 0; 16.2%; Score 11.8; DB 1; Length 17; 33.3%; Pred. No. 6.3e+02; tive 8; Mismatches 2; Indels 915 TGGTCTTTGCCTTTT 929 2 UGAUCUUUGCCUUCU 16 Conservative Query Match Best Local Similarity 5; Conserve

ABV83094 standard; DNA; 17 BP.

ABV83094/c ID ABV830 XX RESULT 177

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03-JAN-2003

ABV83094;

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acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HBR2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HTV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rehumatic activity. The nucleic acid molecules are useful for reducing also useful for reducing place, workin, colorectal, lung, prostate, bladder, or panoreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ66531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a novel short interfering RNA (siRNA) nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                                        Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
anti-rheumatic; cancer; AIDS; ss.
                                                                                                                                           Human K-Ras DNAzyme substrate #801.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 58; Page 100; 185pp; English.
  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-MAX-2001; 2001US-0294140P.
06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                                                                                                                                                                                                                                                                                                                                             29-MAY-2002; 2002WO-US016840
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ABZ60689 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ribozymes of the invention
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                                                                                            (first entry)
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                                                                                                                                                                                                                                                                                                                                      WO200297114-A2
                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                            21-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                   05-DEC-2002.
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                                               ABZ60689;
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was important in regulating male germ cell development, and the HTPL gene useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of such disorders associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an
                                                                                                                                    Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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                                                                                       Human HTPL scanning oligonucleotide SEQ ID 4340.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 2; Page 632; 718pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001WO-US000664.
2001WO-US000665.
2001WO-US000667.
2001WO-US000668.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001US-US006669.
33-MAY-2001; 2001US-0864761.
09-OCT-2001; 2001US-0327898P.
                                                                                                                                                                                                                                                                                                                                                                                                       28-JAN-2002; 2002EP-00001167
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 redrerrreaction 3
                                          (first entry)
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les 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-676582/73.
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30-JAN-2001; 30-JAN-2001; 30-JAN-2001;

Zhan J;

Homo sapiens EP1229046-A2

07-AUG-2002

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Gaps
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                                                                                                                                    0;
                                                             16.2%; Score 11.8; DB 1; Length 17; 40.0%; Pred. No. 6.3e+02; ative 7; Mismatches 2; Indels
Sequence 17 BP; 4 A; 3 C; 1 G; 0 T; 9 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TRAF5 antisense oligonucleotide ISIS# 26943.
                                                                                                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                 937 CICITCALIGGILLA 951
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example from the

Query Match

Best Loca Matches

3SULT 178 3Z60689

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AAZ65564 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ77440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies the human genome, and in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the development of pharmaceutical agents acting on a disease as well as the characterisation of the differential efficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and association in the Sequence Listing from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human, SRA; steroid receptor RNA activator; cytostatic; antiinflammatory; SRA inhibitor; cancer; infection; antisense oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16.2%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.5e+02; ive 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                          Chumakov I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 9; Page 1642; 2745pp; English.
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(BAYU ) BAYLOR COLLEGE MEDICINE.
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                                                                              99WO-IB000822.
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                                                                                                                                                                                                                                                                                                                                                      Cohen D, Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            map of the human genome
                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-013267/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
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                                                                                                                                                                                                                                                                            (GEST ) GENSET
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                                                                              21-APR-1999;
                                                                                                                                                        21-APR-1998;
23-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-AUG-2000.
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28-OCT-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present threates to antiberse or produced to the present threates of the present threates comprise at least one modified internucleotide linkage, which is a phosphorothicate linkage. The oligomucleotides also include at least one modified sugar moiety such as a 2'-O-methoxyethyl sugar moiety.

Sequences AAA55490-A55495 represent nucleotide sequences encoding human TRAPL-6. Included in the invention is a method for treating a human having a disease associated with the expression of TRAP comprising administering an antisense oligomucleotide. The reduction of jun kinase activation in cells comprises contacting the cells with an antisense oligomucleotide targeted to TRAP-6. A method for the reduction of E-coligomucleotide targeted to TRAP-6. A method for the reduction of E-coligomucleotide targeted to TRAP-6. The antisense oligomucleotide targeted to TRAP-6. The antisense oligomucleotides have antiproliferative and anti-coligomucleotides and anti-coligomucleotides have antiproliferativ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antisense oligonucleotides targeted to nucleic acids encoding human tumor necrosis factor receptor-associated factor (TRAF), useful for treating diseases associated with TRAF expression such as inflammatory diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  present invention relates to antisense oligonucleotides (see AAA55496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The antisense oligonucleotides
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human genome; biallelic marker; high density disequilibrium map;
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Best Local Similarity
                                                                                                                   WO200020435-A1.
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                                         Synthetic.
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RESULT 180 AAZ72264

Matches

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Gaps

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                                                                 Antisense compounds targeted to steroid receptor RNA activator useful for diagnosis, prophylaxis and treatment of diseases associated with the steroid activator, such as infection, inflammation or tumor formation.
                                                                                                                                                                                                                                                                            The present sequence is one of a large number of antisense oligonucleotides which is directed against one of four human steroid receptor RNA activator (SRA) nucleic acid sequences. Two series of antisense oligonucleotides were synthesised. The first series comprised 8-30 oligodeoxynucleotides with a phosphorothicate backbone. The second region, consisting of ten 2'-deoxynucleotides, which was flanked on both sides by four-nucleotide wings. The wings were composed of a central gap region, consisting of ten 2'-deoxynucleotides, which was flanked on both sides by four-nucleotide wings. The wings were composed of 2'-methoxyethyl (2'-MOE) nucleotides. Both series contained the same mucleotide sequences. The antisense compounds are useful for research, diagnosis, treatment and prophylaxis to prevent or delay infection, inflammation or tumour formation. Therapeutically the oligonucleotides are highly safe and are effectively administered to humans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Haematopoietic cell proliferation disorder related oligonucleotide #720.
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                                                                                                                                                                                                                  Claim 3; Col 41; 47pp; English
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WPI; 2000-586211/55
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gene therapy;
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Synthetic.
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The present invention describes a method for detecting and differentiating between haematopoietic cell proliferative disorders associated with at least I gene and/or their regulatory regions in a subject. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at least I reagent, which distinguishes between methylated and non-methylated of polariotic distinguishes between methylated and non-methylated of polariotic distinguishes between methylated and non-methylated of polariotic distinction colloques within the target uncleic acid, AB209861 to ABZ1118 represent specifically claimed nucleotide sequences from the present invention can be used: for differentiating between healthy haematopoietic cells and proliferative disorder haematopoietic cells; for differentiating between acute determining the cytosine methylation state and/or single nucleotide polymorphisms (SNPs) of haematopoietic cell proliferation disorder related sequences and their complements; and as primers for the amplification of haematopoietic cell proliferation disorder related bNA sequences. The nucleotide sequences from the present invention can also be used for detecting a predisposition to, differentiation obtawen subclasses, diagnosis, prognosis, treatment and/or monitoring of haematopoietic cell proliferative disorders. The present method enables a highly specific classification of haematopoietic cell proliferative disorders and informative of haefing a predisposition of haematopoietic cell proliferative disorders.
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G, Lesche R, Leu E;
Mueller V, Otto T, Pelet C;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                highly specific classification of naematopoletic cell proliterative disorders allowing for improved and informed treatment of patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene therapy, lymphocytic leukaemia, acute myelogenous leukaemia, cytosine methylation state; probe; primer; ss.
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86.7%; Pred. No. 6.5e+02;
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Best Local Similarity 86.7
Matches 13; Conservative
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Detecting and differentiating between hematopoietic cell proliferative disorders, comprises contacting a target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides.

Claim 15; Page 51; 117pp; English.

ΰ Pelet

Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J; Olek A, Pièpenbrock C, Adorjan P, Grabs G, Lesche R, Leu E; Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T, Schwope I, Ziebarth H;

WPI; 2003-018942/01.

The present invention describes a method for detecting and differentiating between haematopoietic cell proliferative disorders associated with at least 1 gene and/or their regulatory regions in a subject. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at least 1 reagent, which distinguishes between methylated and non-methylated CpG dinucleotides within the target nucleic acid. ABZ09861 to ABZ1118 represent specifically claimed nucleotide sequences from the present invention. Oligonucleotides from the present invention can be used: for differentiating between healthy haematopoietic cells and proliferative disorder haematopoietic cells; for differentiating between acute of soorder haematopoietic cells; for differentiating between acute of soorder haematopoietic cells; for differentiating between acute of soorder haematopoietic cell proliferation disorder related sequences and their complements; and as primers for the polymorphisms (SNPs) of haematopoietic cell proliferation disorder related sequences and their complements; and as primers for the sequences. The nucleotide sequences from the present invention can also be used for detecting a predisposition to, differentiation between subclasses, diagnosis, prognosis, treatment and/or monitoring of haematopoietic cell proliferative disorders. The present method enables a highly specific classification of haematopoietic cell proliferative disorders. The present method enables a highly specific classification of haematopoietic cell proliferative disorders. The present method enables disorders allowing for improved and informed treatment of patients Sequence 18 BP; 5 A; 2 C; 3 G; 8 T; 0 U; 0 Other;

Gaps ; 0 16.2%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.5e+02; 2; Indels 0; Mismatches Conservative Query Match Best Local Similarity 13; Matches

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945 TGGTTTAATGTATCG 959 TTGTTTAACGTATCG 15 Н

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ADC70095 standard; DNA; 18 BP ADC70095; RESULT 184 ADC70095

18-DEC-2003 (first entry)

Primer oligo used for analysing CpG islands in genomic DNA (SeqID 585).

PCR; primer, ss; lung cell proliferative disorder; CpG dinucleotide; adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer; cytosine methylation state.

Unidentified

WO2003052135-A2

26-JUN-2003

10-DEC-2002; 2002WO-EP014026.

14-DEC-2001; 2001DE-01061625

(EPIG-) EPIGENOMICS AG.

Genc B, Liloglou T, Lipscher E, Field JK, Burger M,

Nimmrich I;

Maier S;

Detecting and differentiating cytosine methylation state of genomic DNA, useful for diagnosing, treating prognosticating and/or monitoring lung cell proliferative disorders e.g. adenocarcinoma and squamous cell carcinoma. WPI; 2003-533029/50.

Claim 15; SEQ ID NO 585; 58pp; English.

differentiating between lung cell proliferative disorders associated with at least one gene and/or their regulatory regions. Specifically, it refers to a method comprising contacting a target nucleic acid in a biological sample with at least one reagent, wherein the reagent is able to distinguish between methylared and non-methylated CpG dinucleotides present in the target DNA. As such, it is possible to further differentiate and diagnose medical conditions including adenocarcinoma

This invention relates to a novel method for detecting and

. 0 This invention relates to a novel method for detecting and differentiating between lung cell proliferative disorders associated with at least one gene and/or their regulatory regions. Specifically, it refers to a method comprising contacting a target nucleic acid in a biological sample with at least one reagent, wherein the reagent is able to distinguish between methylated and non-methylated CpG dinucleotides present in the target DNA. As such, it is possible to further differentiate and diagnose medical conditions including adenocarcinoma and squamous cell carcinoma, and their respective adjacent lung tissue. The present invention describes cytostatic oligomers and PNA-oligomers that are useful as probes for determining the cytosine methylation state or single nucleotide polymorphisms (SNPs) of the target sequence. This oligomucleotide sequence is a primer oligomer used for the analysis of CpG positions within genomic DNA, used in an exemplification of the PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide; adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer; Detecting and differentiating cytosine methylation state of genomic DNA, Primer oligo used for analysing CpG islands in genomic DNA (SeqID 584). useful for diagnosing, treating prognosticating and/or monitoring lung cell proliferative disorders e.g. adenocarcinoma and squamous cell Gaps .. Ω .. Lipscher E, Maier 16.2%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.5e+02; Indels iive 0; Mismatches 2; Indels Sequence 18 BP; 5 A; 0 C; 3 G; 10 T; 0 U; 0 Other; Liloglou T, Claim 15; SEQ ID NO 584; 58pp; English. m m ВР 10-DEC-2002; 2002WO-EP014026. 14-DEC-2001; 2001DE-01061625. TGGTTTAATGTATCG 959 1 TIGITIAAIGIATIG 15 ADC70094 standard; DNA; 18 cytosine methylation state. Genc (first entry) Conservative (EPIG-) EPIGENOMICS AG. Field JK, Query Match Best Local Similarity Matches 13; Conserva WPI; 2003-533029/50. WO2003052135-A2 18-DEC-2003 Unidentified 26-JUN-2003. Nimmrich I; carcinoma. invention Σ ADC70094; 945 Burger RESULT 185 ADC7009 ò 염

and squamous cell carcinoma, and their respective adjacent lung tissue. The present invention describes cytostatic oligomers and PNA-oligomers that are useful as probes for determining the cytosine methylation state or single nucleotide polymorphisms (SNPs) of the target sequence. This oligomucleotide sequence is a primer oligomer used for the analysis of CPG positions within genomic DNA, used in an exemplification of the

Sequence 18 BP; 5 A; 2 C; 3 G; 8 T; 0 U; 0 Other;

ö Gaps ·. 0 16.2%; Score 11.8; DB 1; Length 18; larity 86.7%; Pred. No. 6.5e+02; Conservative 0; Mismatches 2; Indels Similarity Query Match Best Local Simil Matches 13; C

SSULT 186

ADE84422 standard; DNA; 18

BP.

ADE84422;

(first entry) 29-JAN-2004

Human lymphoid cell proliferative disorder gene CpG analysis oligo #128.

methylated CpG dinucleotide; single nucleotide polymorphism; SNP; diffuse large B-cell lymphoma; martle cell lymphoma; chronic lymphocytic leukemia; small lymphocytic lymphoma; follicular lymphoma; diagnosis; prognosis; primer; ss. lymphoid cell proliferative disorder, methylation;

Homo sapiens.

WO2003044226-A2,

30-MAY-2003

25-NOV-2002; 2002WO-EP013265

23-NOV-2001; 2001DE-01057491. 28-DEC-2001; 2001DE-01064501.

(EPIG-) EPIGENOMICS AG.

Becker Genc B,

Nimmrich I;

Maier S,

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ນ Caldwell Burger M,

WPI; 2003-457621/43.

Detecting and differentiating between lymphoid cell proliferative disorders comprises contacting a target nucleic acid with at least on reagent that distinguishes between methylated and non-methylated CpG dinucleotides.

Claim 30; SEQ ID NO 418; 448pp; English.

The invention relates to a method of detecting and differentiating between lymphoid cell proliferative disorders associated with at least one gene and/or their regulatory regions in a subject by contenting at larget nucleic acid in a biological sample obtained from the subject with at least one reagent or series of reagents that distinguish between methylated and non-methylated CpG dinucleorides within the target nucleic acid. The genes and/or their regulatory regions are preferably selected from MDR1, CBNR2B, EGR4, AR, CDK4, RB2, CDC25A, GPID beta, MYOD1, CDR3, WYCL1, ELK1, ABL1, ABC, BCL2, CDH1, CDKN1B, CDKN1B, CDKN2B, FOS, GSTPL1, HC-1, MGMT, MLH1, MOS, MYC, PTEN, RBL2, TGFBR2, TP73, CDRNIC, GSTR2B, APAPI, BAXI, BAX or HOXAS. Oligomers, peptide nucleic acid (PNA) -oligomers and/or isolated nucleic acids based on the sequences of the genes are useful for detecting the methylation state of all the CpG dinucleotides within one or more the sequences, or their complements,

The invention relates to a method of detecting and differentiating between lymphoid cell proliferative disorders associated with at least one gene and/or their regulatory regions in a subject by contacting a target nucleic acid in a biological sample obtained from the subject with at least one reagent or series of reagents that distinguish between methylated and non-methylated CpG dinucleotides within the target nucleic acid. The genes and/or their regulatory regions are preferably selected from WDR1, CBMXB, EGR4, AR, CDK4, RB2, CDC25A, GFD beta, MYOD1, CDH3, MYCL1, ELK1, ABL1, APC, BCL2, CDH1, CDKNIB, CDKNIB, CDKNIB, CDKNIB, CBCKSPET, HIC-1, MGMT, MLH1, MOS, MYC, PTEN, TGFRR2, TP73, CDKNIC, GSK3Deta, ESR1, APARI, BAX, BAX or HOXAS. Oligomers, peptide nucleic acid (PNA)-oligomers and/or isolated nucleic acids based on the sequences

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for determining the cytosine methylation state and or single nucleotide polymorphisms (SNPs), and for differentiating at least two of the medical conditions such as diffuse large B-cell lymphoma, mantle cell lymphoma, chronic lymphocytic leukemia, small lymphocytic lymphoma and follicular lymphoma. They are also useful for detecting of a predisposition to, moliferentiation between subclasses, diagnosis, prognosis, treating and/or monitoring of lymphoid cell proliferative disorder. This sequence represents an oligonucleotide used to analyse of CpG positions within the
                                                                                                                                                                                                                                                                                                                                                                                                                             Human lymphoid cell proliferative disorder gene CpG analysis oligo #127.
                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      methylated CpG dinucleotide; single nucleotide polymorphism; SNP; diffuse large B-cell lymphoma; mantle cell lymphoma; chronic lymphocytic leukemia; small lymphocytic lymphoma;
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                                                                                                                                                Sequence 18 BP; 5 A; 0 C; 3 G; 10 T; 0 U; 0 Other;
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                                                                                                                                                                           Score 11.8; DB 1;
Pred. No. 6.5e+02;
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86.7%;
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28-DEC-2001; 2001DE-01064501.
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                                                                                                                                                                                                        13; Conservative
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                                                                                                                     above mentioned genes.
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                                                                                                                                                                                           Local Similarity
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ADE84421
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ACC64682 standard; DNA; 17 BP

ACC64682

(first entry)

01-JUL-2003

ACC64682;

tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ss. Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; Murine oligonucleotide associated with tumour supression, SEQ ID 1929.

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Tulinder

Amson R,

relerman A,

WPI; 2003-333167/31.

(MOLE-) MOLECULAR ENGINES LAB

17-SEP-2002; 2002WO-IB004210. 17-SEP-2001; 2001FR-00011979.

402003025176-A2

27-MAR-2003.

Aus musculus

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            Ogg dinucleotides within one or more the sequences, or their complements, for determining the cytosine methylation state and or single nucleotide polymorphisms (SNPs), and for differentiating at least two of the medical conditions such as diffuse large B-cell lymphoma, mantle cell lymphoma, chronic lymphocytic leukemia, small lymphocytic lymphoma and follicular lymphoma. They are also useful for detecting of a predisposition to, differentiation between subclasses, diagnosis, prognosis, treating and/or monitoring of lymphoid cell proliferative disorder. This sequence represents an oligonucleotide used to analyse of CpG positions within the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Trypsin digest fragments of purified proctase B were used to design PCR primers for cloning of the proctase B gene. A cDNA library was prepd. from Aspergillus niger and a DNA primer synthesised. A specific DNA probe was amplified from the template library by PCR and the proctase B gene cloned into E. coli HB101 for expression of the proctase B precursor. See
 genes are useful for detecting the methylation state of all the
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Pred. No. 6.8e+02;
3; Mismatches 2; Indels
                                                                                                                                                                                                                                  16.2%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.5e+02; ive 0; Mismatches 2; Indels
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                                                                                                                                                                                                   Sequence 18 BP; 5 A; 2 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Precursor; cloning; trypsin; amplification; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR primer for the proctase B gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 7; 10pp; Japanese.
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Best Local Similarity 68.8
Matches 11; Conservative
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                                                                                                                                                                                                                                                                                                       945 TGGTTTAATGTATCG
                                                                                                                                                                     above mentioned genes.
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Best Local Simi
Matches 13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ch 15.9%; Score 11.6; DB 1; Length 17; Similarity 91.7%; Pred. No. 6.8e+02; 11; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 1 A; 4 C; 2 G; 9 T; 0 U; 1 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and transfected cells.
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Best Local 8
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ID ABC25
XX AC ABC25
XX DT 20-FI
XX SWP;
KW SNP;
KW SPD;
KW PEPL.
XX Cent.
XX HOMO
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RESULT 189

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99899, ABH00010-ABE99899 and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                            Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15.6%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 6.2e+02; ative 0; Mismatches 1; Indels
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                                                                                                                                           Claim 1; SEQ ID NO 35614; 29pp + Sequence Listing; German.
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WPI; 2001-657177/75
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Oligonucleotide SEQ ID NO 25859 for detecting SNP TSC0006595.

(first entry)

20-FEB-2002

ABC25842;

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ABC25842 standard; DNA; 13

RESULT 194

ABC25842

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This invention describes novel oligonuclectide primers or peptide nucleic acid (RNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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        oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99889, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fig. wipo.int/pub/published_pct_sequences
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                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Query Match 15.6%; Score 11.4; DB 1; Length 13; Best Local Similarity 92.3%; Pred. No. 6.2e+02; Matches 12; Conservative 0; Mismatches 1; Indels

Homo sapiens.

18-OCT-2001

Berlin K;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                         Oligonucleotide SEQ ID NO 40113 for detecting SNP TSC0012202.
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was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers ealso used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABR99889 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                            acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a
                                              This invention describes novel oligonucleotide primers or peptide nucleic
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             Claim 1; SEQ ID NO 20194; 29pp + Sequence Listing; German.
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                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and oytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0910-ABE09989, ABF00010-ABF99989, ABH00010-ABF99989, ABH00010-ABF99989, and ABI00010-ABF99989, and ABI00010-ABF99989, and ABI00010-ABF99980 and ABI00010-ABF999980 and ABI00010-ABF99999 and ABI00010-AB

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This invention describes novel oligonucleotide primers or peptide nucleic and (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABF00010-ABF9989, and ABI00010-ABI82073 fare for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequence
central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                               Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, and metabolic disorders. The represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                              Oligonucleotide SEQ ID NO 131354 for detecting SNP TSC0032783.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oligonucleotide SEQ ID NO 35613 for detecting SNP TSC0011256.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15.6%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 6.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 131354; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Berlin K;
                                                          ABF31357 standard; DNA; 13 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABC35596 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-APR-2000; 2000DE-01019173
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                                                                                                                                                  21-FEB-2002 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                          WO200177384-A2
                                                                                                                                                                                                                                                                                                                                Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                      18-OCT-2001
                                                                                                      ABF31357;
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                  SULT 200
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3C35596
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0

Gaps

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Gaps

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set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                     ABC54455 standard; DNA; 13 BP.
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                                                                                                                                                                                                                                                                                                                                          37-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                            21-FEB-2002 (first entry)
                                                                                                                                                     Query Match 15.6
Best Local Similarity 92.3
Matches 12; Conservative
    Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                    (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-657177/75.
                WPI; 2001-657177/75
                                       methylation status.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

Claim 1; SEQ ID NO 54472; 29pp + Sequence Listing; German.

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a claimed enzymatic RNA mol. for the cleavage of apolipoprotein (a) (apo(a)) mRNA, specifically a hammerhead ribozyme, has binding arms complementary to the present sequence (nucleotide position 12974). The ribozyme blocks to some extent apo(a) expression, and can therefore be used to diagnose or treat conditions related to lipoprotein (a) levels, e.g. atherosclerosis, myocardial infarction, stroke, restenosis and heart disease. PCR was used to generate a substrate for T7 RNA polymerase transcription from human apo(a) cDNA clones. Labelled transcripts were synthesised in vitro to form 2 templates. The oligonucleotides and labelled transcripts were annealed, RNaseH added and the mixts.

Incubated. After a designated time the reactions were stopped, and RNA incubated was determined by autoradiographic quantification, and the most accessible ribozyme target sites chosen
and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastroinfestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99889, ABF00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but type.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Enzymatic RNA mols. which cleave apo(a) mRNA - useful in diagnosis and treatment of conditions related to \mathrm{Lp}(a) levels, e.g. atherosclerosis, myocardial infarction, and heart diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Apo(a) mRNA (nt. pos. 12974) hammerhead ribozyme target sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Enzymatic RNA molecule, cleavage, apolipoprotein (a); apo(a); hammerhead ribozyme, target sequence; diagnosis; treatment; lipoprotein (a); atherosclerosis; myocardial infarction, stroke; restenosis; heart disease; human; ss.
                                                                                                                                                                                                                                                                                                                                    15.6%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 6.2e+02; Live 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                    Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 2; Page 18; 37pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                           941 TCATTGGTTTAAT 953
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                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                   Best Local
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                                                                                                                                                                                                                                                                              This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                            of oligonucleotides, useful for diagnosis and cell typing, igned to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oligonucleotide SEQ ID NO 54472 for detecting SNP TSC0014932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 13;
                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 20193; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 13 BP; 7 A; 1 C; 2 G; 3 T; 0 U; 0 Other;
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Pred. No. 6.2e+02;
0; Mismatches 1
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                               Berlin K;
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92.3%;
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AAT37615;

SULT 205

Matches

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Specifically designed oligodeoxyribonucleotides form triplexes in single-
or double-strand DNA at homopurine-homopyrimidine targets. These
triplexes block in vitro DNA synthesis by all DNA polymerases studied,
including Sequenase3, Taq, Vent, and Pol I. A similar phenomenon occurs
when DNA polymerases are supplemented with accessory replication
proteins, including SSB protein. Replication blockage is highly sequence-
specific and even one or two point substitutions within either the target
sequence or the oligomucleotide abolish the effect. Sequence-specific
blocking of DNA replication in vivo is facilitated by the methods and
compositions of the present invention. The present sequence is a triplex-
forming oligonucleotide which targets ORF-Ec of human papilloma virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence specific inhibition of DNA synthesis - by triplex-forming oligo:nucleotide(s), for detection of oncogene mutation(s) and treatment of e.g. HSV, Hepatitis C and Papillomavirus infection.
                                                                                                                                                                                                                                                  HPV; oligodeoxyribonucleotide; homopurine-homopyrimidine target; block;
                                                                                                                                                                                                                                                              in vitro; DNA synthesis; DNA polymerase; Sequenase3; Taq; Vent; Pol I; accessory replication protein; SSB protein; sequence-specific; triplex-forming oligonucleotide; exon 3; inverted repeat; IR110; human papilloma virus; ORF-EC; ss.
                                                                                                                                                                                                      Triplex-forming oligonucleotide targetting HPV ORF-Ec.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 5 A; 0 C; 10 G; 0 T; 0 U; 0 Other;
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Pred. No. 6.8e+02;
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                                                                     BP.
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92.3%;
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                                                                   AAT35030 standard; DNA; 15
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Best Local Similarity 92.35
Marches 12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-DEC-1994;
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                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                               AAT35030;
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AAX34457/C
ID AAX344
XA AAX344
XX XX ZS-JUN
DT 25-JUN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     incubated. After a designated time the reactions were stopped, and RNA sepd. on sequencing polyacrylamide gels. The percentage of substrate cleaved was determined by autoradiographic quantification, and the most accessible riboxyme target sites chosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Enzymatic RNA mols, which cleave apo(a) mRNA - useful in diagnosis and treatment of conditions related to Lp(a) levels, e.g. atherosclerosis, myocardial infarction, and heart diseases.
                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                     Apo(a) mRNA (nt. pos. 12976) hammerhead ribozyme target sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Enzymatic RNA molecule, cleavage; apolipoprotein (a); apo(a); hammerhead ribozyme; target sequence; diagnosis; treatment; lipoprotein (a); atherosclerosis; myocardial infarction; stroke; restenosis; heart disease; human; ss.
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                                       Score 11.4; DB 1; Length 15; Pred. No. 6.8e+02; 6; Mismatches 1; Indels
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Sequence 15 BP; 2 A; 5 C; 1 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Newton RS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 2; Page 18; 37pp; English
                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stinchcomb DT, Mcswiggen J,
                                         15.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95WO-US011995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94US-00311760
                                                                                                                                                                                                                                                                                       AAT37615 standard; mRNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                933 CCTCCTCTTCATT 945
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                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                         2 CAUCCUCUUCAUU 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 UCCUCUUCAUUUG 14
                                                                                      6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1996-188454/19.
                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                11-NOV-1996
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Gaps 0;

Length 15; 1; Indels

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JP2000060564-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                    defined sequence using rolling templates that successively add nucleotides (nts) to a longer primer strand. The method comprises: (i) incubating, under annealing conditions, a primer and a template that has a 5'-region not complementary to the primer, a 3'-region complementary to the primer, a 3'-region complementary to the primer, a 3'-region complementary to the primer, with the template being shorter than the primer; (ii) reacting the primer with at least one in in presence of a template-dependent polymucleotide polymerase to extend it by at least one in (complementary to the 5'-region of template at its 3'-end; (ii) separating the template and the extended primer; and (iv) repeating the cycle of (i)-(iii) as often as needed to synthesize the desired polynucleotide. The method is especially used to produce genes or their segments. The method provides fast, accurate, inexpensive synthesis of RNA or DNA and is more efficient than chemical coupling processes. It has higher specificity and eliminates the need for deprotection. The products can be cloned directly. The method avoids problems of waste disposal and includes an inherent editing effect that was fighted the content of the feature of the content of the conten
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                         invention relates to a method for producing polynucleotides having a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 that purification of the end product is facilitated. Synthesis may talplace on a vector, simplifying cloning and sequences with codon usage optimized for a particular host can be prepared
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
               template; nucleic acid synthesis; polynucleotide polymerase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Trichosporon genus microbe, detection; species-specific; diagnosis; trichosporosis; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 11.4; DB 1; Length 15; Pred. No. 6.8e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Trichosporon aquatile polynucleotide sequence SEQ ID NO:96.
                                                                                                                                                                                                                                                                                                                                                        Producing specific polynucleotides using rolling templates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence 15 BP; 5 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                         Example 5; Page 38; 109pp; English.
                                                                                                                                                                     98WO-US019157.
                                                                                                                                                                                                       97US-00929856.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15.6%;
92.3%;
               Rolling template; nucleic ac
gene production; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         931 TCCCTCCTCTCA 943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA26829 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-JUN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 92...
Best Local 2; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         receretrica 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Trichosporon aquatile
                                                                                                                                                                                                                                                                                                                        WPI; 1999-244045/20
                                                                                                                                                                                                                                                                                        Rose FD;
                                                                                                                                                                                                                                     (HIAT/) HIATT A C. (ROSE/) ROSE F D.
                                                                                                  W09914370-A1
                                                                                                                                                                     15-SEP-1998;
                                                                                                                                                                                                       15-SEP-1997;
                                                                                                                                    25-MAR-1999
                                                                   Synthetic.
                                                                                                                                                                                                                                                                                        Hiatt AC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAA26829;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA26829
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention describes a method for the species-specific detection of a Trichosporon genus microbe which includes detecting a polynucleotide specific to the species of a Trichosporon genus microbe. Trichosporon polynucleotides can be used for the diagnosis and treatment of Trichosporosis. The method can distinguish Trichosporosis species to species level rapidly in high precision. AAA26734 to AAA26849 represent polynucleotide sequences from various Trichosporon species, which are used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                    Species-specific detection of a Trichosporon genus microbe species and a new polynucleotide - used for the diagnosis and the treatment of Trichosporosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15.6%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.8e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 5 A; 2 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 44; 47pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAF49433 standard; DNA; 15 BP
                                                                 98JP-00237060.
                                                                                                                                           98JP-00237060.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IGF-I oligonucleotide #393.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 940 TICATIGGITIAA 952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wraight CJ, Werther GA,
                                                                                                                                                                                                            (IATR ) IATRON LAB INC
                                                                                                                                                                                                                                                                                      WPI; 2000-249679/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-041421/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
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                                                                                                                                       24-AUG-1998;
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                                                                 24-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-MAR-2001
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29-FEB-2000
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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
effects of a disorder,
                                                                                                                                               inflammation.
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Example 8; Page 63; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an autisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the effects of psoriasis, oligonucleotides of the present invention (see AAF45151 and AAF4153-1545161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pliaris, serborrhoea, keloids, keratosis, neoplasiss, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, disease, kidny growth factor-mediated malignancies, other sclerotic disease, kidny disease, hypergroliferation of the inside of blood disease, kidney disease, wire-re-vessels or any other hyperplasia

Sequence 15 BP; 2 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Gaps ; 0 15.6%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.8e+02; tive 0; Mismatches 1; Indels 900 CCTGGTCATTTC 912 12; Conservative Best Local Similarity Query Match Matches

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13 1 CCTGGTCATCTTC

SULT 210 F49430

BP. AAF49430 standard; DNA; 15

AAF49430;

(first entry) 30-MAR-2001

IGF-I oligonucleotide #390

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IfFP-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

2000WO-AU000693. 21-JUN-2000; (MURD-) MURDOCH CHILDRENS RES INST.

99US-0140345P.

21-JUN-1999;

Edmondson SR; Werther GA, Wraight CJ,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

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Skin disorders. The method comprises contacting the skin with an antisense oligomucleotide, (for Insulin-like Growth Ractor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomucleotide which can be used to design the antisense oligomucleotide which can be used to design the antisense oligomucleotide which can be used to design the effects of psoriasis, F5161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperprorection of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                  The present invention relates to a method for ameliorating the effects of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 1 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 11.4; DB 1;
Pred. No. 6.8e+02;
0; Mismatches 1;
                       Example 8; Page 63; 201pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 92.3%;
Matches 12; Conservative
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RESULT 211 AAF70053/

AAF70053 standard; DNA; 15

BP.

AAF70053;

18-APR-2001 (first entry)

Human TNFRSF11B gene ASO probe, SEQ ID NO: 109.

Human; TNFRSF11B; osteoclastogenesis inhibitory factor; single nucleotide polymorphism; SNP; osteoclast recruitment; osteoclast function; osteoporosis; metastatic bone disease; Paget's disease; rheumatoid arthritis; periodontal bone disease; ASO; allele-specific oligonucleotide; probe; ss.

Ношо

WO200104137-A1.

18-JAN-2001.

10-JUL-2000; 2000WO-US018803.

99US-0143020P. 09-JUL-1999; (GENA-) GENAISSANCE PHARM INC.

Stephens JC; Duda A, Nandabalan K, Denton RR, Chew A,

WPI; 2001-147175/15.

Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's disease and rheumatoid arthritis.

Claim 15; Page 23; 114pp; English.

The present sequence is a probe used to detect polymorphisms in the human osteoclastogenesis inhibitory factor (TNRRSF11B). Polymucleotides comprising one or more of twenty four novel single nucleotide polymorphisms in the TNRRSF1B gene have been identified. TNRRSF1B regulate osteoclast recruitment and function. An understanding of

ABL57627 standard; DNA; 15 BP

RESULT 213

ABL57627

ABL57627;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             isolated polynucleotide useful for the identification of therapeutics
variations in the gene should thus be useful in developing new therapies for metabolic disorders caused by abnormal osteoclast recruitment and function such as osteoporosis, metastatic bone disease, Paget's disease, rheumatoid arthritis and periodontal bone disease
                                                                                                                                                                             Gaps
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        interleukin 4 receptor-alpha; IL4R-alpha;
                                                                                                                                   15.6%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.8e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 11.4; DB 1; Length 15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 5 A; 3 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                   G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  identified by these methods may be useful for all present sequence is a probe for human IL4R-alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 15; Page 42; 188pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human IL4Ralpha gene probe #24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GENA-) GENAISSANCE PHARM INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Duda A,
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                                                                                                 Sequence 15 BP; 7 A; 3 C; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          allergic disease; probe; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                in allergic diseases is new
                                                                                                                                                                                                                 906 CATTITITIGGT 918
                                                                                                                                                                                                                                                                                                                                                  AAF69384 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                       Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                     CATTTACTTIGGT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Polymorphism; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-103078/11.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Windemuth AK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                              18-APR-2001
                                                                                                                                                                                                                                                     15
                                                                                                                                                                                                                                                                                                                                                                                          AAF69384;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chew A,
                                                                                                                                                                                                                                                                                                              RESULT 212
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a novel isolated polynucleotide comprising a small inducible cytokine subfamily A (cys-cys), member 24 (SCYA24) isogene. The polypeptide of the invention has antiasthmatic activity. The polynucleotide may have a use in gene therapy. The polynucleotide and polypeptide are useful in the the development of drugs for treating diseases associated with SCYA24 activity, e.g. respiratory inflammatory diseases such as asthma. Allele-specific oligonucleotide (ASO) primers used for detecting polymorphisms in the SCYA24 gene are represented in ABLS7616-ABLS7645
                                                                                                             SCYA24; human; small inducible cytokine; isogene; antiasthmatic; asthma; gene therapy; respiratory inflammatory disease; polymorphism; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                 New genetic variants of small inducible cytokine subfamily A member 24 gene, useful in studying expression and function of the protein, and for screening drugs to treat diseases such as asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, aryl hydrocarbon nuclear transport, ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; harmerabead ribozyme; angiogenic factor, cytostatic; antidiabetic; ophthalmologic; antiniflammatory; antiarthritic; antipsoriatic; ARWM; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 11.4; DB 1; Length 15;
Pred. No. 6.8e+02;
1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 8 A; 0 C; 6 G; 0 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human TIE-2 substrate sequence SEQ ID NO:2200.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 16; Page 14; 98pp; English.
                                                                                                                                                                                                                                                                                                                                                                       Kazemi A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                      (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                    10-SEP-2001; 2001WO-US028328.
                                                                                                                                                                                                                                                                                                   18-SEP-2000; 2000US-0231129P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15.6%;
80.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             941
                                                                                Human SCYA24 ASO primer #12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA18974 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             l Similarity 80.0
12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                     Anastasio AE, Han J,
                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-351785/38
                                                                                                                                                                                                   WO200220851-A1.
                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-JUN-2000
                                               08-OCT-2002
                                                                                                                                                                                                                                 14-MAR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA18974;
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Best Local S
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Gaps

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1; Indels

Pred. No. 6.8e+02; 0; Mismatches 1

92.3%;

Best Local Similarity

12;

Matches

Conservative

900 CCTGGTCATTTTC 912

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15 ccedercarrrrc 3

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The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA1675 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, corresponding target sequences; AAA17685 to AAA18185 and AAA19086 and AAA19155 to AAA19122 represent ribozyme sequences for Tie-2, and AAA18186 to AAA19086 and AAA19155 to AAA19122 represent ribozyme sequences; AAA19223 to AAA1922 represent ribozyme sequences; AAA19223 to AAA20361 and AAA21501 to AAA21955 represent ribozyme sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and AAA21699 to AAA21689 represent ribozyme sequences for integrin subunit beta 3, and AAA23476 to AAA23422. represent ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially age related macular degeneration (ARND), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, and alphacoma of tuberous sclerosis, pot-wine stains, sturge Weber
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel ribozymes for modulating the synthesis, expression and/or stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     angiofibroms of tuberous sclerosis, pot-wine stains, Sturge Webersyndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2,
age related macular degeneration; inflammation; neovascular glaucoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mcswiggen JA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 2 A; 7 C; 0 G; 0 T; 8 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of an mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 56; Page 128; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA20484 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                    99WO-US006507.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         98US-0079678P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 924 CCTTTTATCCCTC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
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CAUUUUAUCCCUC 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-591315/50.
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Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                       W09950403-A2
                                                                                                                                                                                                                                                                                                                                                                                    24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-MAR-1998;
                                                                                                                                                                                                                                                                                                            07-0CT-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pavco PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAA20484;
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A20484
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Integrin alpha 6 subunit substrate sequence SEQ ID NO:3710.

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The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNY) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA1767 to AAA17167 and AAA1768 to AAA1768 to AAA1767 to AAA1767 and AAA1768 to AAA1768 to AAA196775 to AAA19154 represent ribozyme sequences; AAA19185 and AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to AAA19221 represent their corresponding target sequences; CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to AAA19222 represent their corresponding target sequences; AAA19223 to AAA21921 represent their corresponding target sequences; CC AAA19256 to AAA21689 to AAA21681 represent their corresponding target sequences; AAA1689 to AAA21687 and AAA21675 to AAA21342 to AAA21343 to CC CAA21689 to AAA21687 and AAA21676 to AAA21342 to AAA21343 to CC CAA21689 to AAA21689 to AAA21680 to 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.
Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; posriasis; verruer vulgaris; angiofibroma; tuberous sclerosis; bot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcswiggen JA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          integrin subunit alpha-6, or integrin subunit beta-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 11.4; DB 1;
Pred. No. 7.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 55; Page 148; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US006507.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0079678P,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (RIBO-) RIBOZYME PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-591315/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                       WO9950403-A2.
                                                                                                                                                                                                                                                                                                                                                                                                          24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                      07-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pavco PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA18976;
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Human; aryl hydrocarbon nuclear transport; ARNT; TIB-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiniflammatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Rippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

Homo sapiens.

Integrin alpha 6 subunit substrate sequence SEQ ID NO:3708.

(first entry)

19-JUN-2000

AAA20482;

AAA20482 standard; RNA; 17 BP

RESULT 217

AAA20482

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The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl bydrozabon nuclear transporter (ARNY) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17165 to AAA17651 to AAA17651 to AAA17650 and AAA1762 represent ribozyme sequences for ARNT, corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to AAA19155 to AAA191522 represent their corresponding target sequences; AAA19152 represent their corresponding target sequences; AAA19152 to AAA19155 to AAA2168 represent their corresponding target sequences; AAA21689 to AAA2169 represent their corresponding target sequences; AAA21689 to AAA2165 and AAA2165 to AAA21342 tepresent their corresponding target sequences; AAA21689 to AAA2165 and AAA2166 to AAA21669 to AAA21660 and AAA21669 to AAA21669
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                                                                                                                                                                                            Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; harmwenead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antidiahmatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; pot-anies status; veruca vulgaris; angiofibroma; tuberous sclerosis; pot-anies stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mcswiggen JA;
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Pred. No. 7.3e+02;
6; Mismatches 1; Indels
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                                                                                                         Human TIE-2 substrate sequence SEQ ID NO:2202.
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19-JUN-2000 (first entry)
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Best Local Similarity
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cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a rie-2 gene. AAA16775 to AAA17651 to AAA17622 represent ribozywe sequences for ARNT, and AAA1765 and AAA17623 to AAA17684 represent their corresponding target sequences; AAA17685 to AAA18385 and AAA18386 to AAA19154 represent ribozywe sequences; AAA19155 to AAA19222 represent their corresponding target sequences; CC AAA19233 to AAA20361 and AAA21855 represent ribozywe sequences for integrin alpha 6 subunit, and AAA20362 to AAA2130 and AAA21596 to AAA21853 represent ribozywe sequences; CC AAA19253 to AAA21353 to AAAA2352 represent ribozywe sequences; CC AAA21556 to AAA21363 and AAA2343 and AAA22476 to AAA23342 represent ribozywe sequence for integrin subunit beta 3, and AAA22476 to AAA23343 and AAA23343 to AAA23422 represent their corresponding target sequences. The ribozywe sequence for integrin subunit beta 3, and AAA22476 to AAA23343 are acquenced for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, cregin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are sepecially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARND), inflammation, and arthritis as well as macular degeneration (ARND), inflammation, solar-where stains, sturge where remained remains, where remained remains, where remained remains, where remained rema
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15.6%; Score 11.4; DB 1; Length 17; 30.8%; Pred. No. 7.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0079678P.
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Best Local Similarity
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BP. AAA18975 standard; RNA; 17

AAA18975;

(first entry) 19-JUN-2000

Human TIE-2 substrate sequence SEQ ID NO:2201.

integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiathritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; veruce aulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; ss. aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; Human;

Homo sapiens.

W09950403-A2.

07-0CT-1999

99WO-US006507 24-MAR-1999;

98US-0079678P 27-MAR-1998;

(RIBO-) RIBOZYME PHARM INC.

Mcswiggen JA; Coeshott C, Jarvis T, Roberts E, Pavco PA,

WPI; 1999-591315/50.

Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.

Claim 56; Page 128; 305pp; English.

The present invention describes enzymatic nucleic acid molecules with RNA syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber integrin subunit alpha-6, or integrin subunit beta-3

Sequence 17 BP; 3 A; 6 C; 0 G; 0 T; 8 U; 0 Other;

· 0 Gaps ö Length 17; 1; Indels Score 11.4; DB 1; Pred. No. 7.3e+02; 6; Mismatches 1; 15.6%; 46.2%; 924 CCTTTTATCCCTC 936 Query Match
Best Local Similarity 46.27 4 CAUUUUAUCCCUC 16 엄 ð

RESULT 219 AAA20483

BP. AAA20483 standard; RNA; 17

AAA20483;

(first entry) 19-JUN-2000

Integrin alpha 6 subunit substrate sequence SEQ ID NO:3709.

Human, aryl hydrocarbon nuclear transport, ARNT, TIE-2; angiogenesis, integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antidialmatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; veruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; ss.

Homo sapiens.

WO9950403-A2

07-OCT-1999.

24-MAR-1999;

99WO-US006507.

98US-0079678P.

27-MAR-1998;

(RIBO-) RIBOZYME PHARM INC.

WPI; 1999-591315/50.

Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.

Coeshott C, Mcswiggen JA;

Jarvis T,

Roberts E,

Pavco PA,

Claim 55; Page 148; 305pp; English.

The present invention describes enzymatic nuclear actor molecules with kname cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin alpha 6 subunit gene, or a file-2 gene. AAA1761 to AAA1762 represent ribozyme sequences for ARNT, and AAA17167 and AAA1766 and AAA1762 to AAA17684 represent their corresponding target sequences; AAA17685 to AAA18185 and AAA19087 to AAA19154 represent ribozyme sequences; AAA19155 to AAA19122 represent their corresponding target sequences; CAAA19154 represent ribozyme sequences for integrin alpha 6 subunit, and AAA20362 to AAA21900 and AAA19159 to AAA20361 and AAA2150 and AAA20362 to AAA20362 to AAA21500 and AAA2150 to AAA20362 to AAA21300 and AAA2150 to AAA20362 to AAA21300 and AAA2150 to AAA20362 to AAA21300 and AAA21600 to AAA23422 represent their corresponding target sequences. The ribozyme of for integrin subunit beta 3, and AAA22475 to AAA23342 to AAA23343 to AAA23422 represent their corresponding target sequences. The ribozyme of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related sequenced (ARND), inflammation, and arthritis, as well as meaular degeneration (ARND), inflammation, and arthritis, as well as meaular degeneration (ARND), inflammation, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber The present invention describes enzymatic nucleic acid molecules with RNA

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                                                                                                                                                                                                                                                                                                                            Human; se; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurie growth inhibitor gene; NGG0; hammerhead ribozyme; DNAzyme; incygme; G-Cleaver; amberzyme; lymphoma; neurie growth inhibitor gene; NGG1; hammerhead ribozyme; h-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCI; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huncington's disease; creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3
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                                                    Sequence 17 BP; 2 A; 3 C; 3 G; 0 T; 9 U; 0 Other;
                                                                            15.6%; Score 11.4; DB 1; 30.8%; Pred. No. 7.3e+02; tive 8; Mismatches 1
                                                                                                                                                                                                                                                                                                       Human CD20 Hammerhead ribozyme #134.
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                                                                                                                                                                                                                          ABK02835 standard; RNA; 17 BP.
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28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
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MCSWIGGEN J.
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Matches
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an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with a cleaving to a referably Mg^2/+

of CD20 in the presence of a divalent cation that is preferably Mg^2/+.

Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more the cell in paticular, bulky low-grade or follicular non-Hodgkin's lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (MLI), bulky low-grade or follicular non-Hodgkin's lymphoma (MLI), bulky low-grade or follicular nantle-cell lymphoma (MLI), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immunocytoma (IMC), small B-cell lymphocytic lymphoma, immunocytoma (IMC), small B-cell lymphocytic lymphoma, corpused to insect to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably MG^2+. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of the coll and treat a patient having a condition associated with the level of the treat central nervous system (CNS) injury and cerebrovascular accident (CVR, stroke), Alzheimer's disease, dementia, multiple solerosis (ALS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), parkinson's disease, muscular dystrophy, amyotrophic lateral sclerosis (ALS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), parkinson's disease, muscular dystrophy, amyotrophic lateral sclerosis (ALS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), charaction which returedenter and and and and and and and a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            states which respond to the modulation of NOGO expression. The present
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sequence is a hammerhead ribozyme of the invention
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28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
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5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human CD20 Inozyme #153.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .6-AUG-2001.
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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RESULT 223
ABK25224/c
ID ABK252:
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    ò
                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a nucleic acid molecule which down regulates expression of a neurite growth inhibitor good.

regulates expression of a neurite growth inhibitor good.

regulates expression of a neurite growth inhibitor good.

nucleic acids may be enzymatic nucleic acid cleaving a an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NRN motif) propersessing an NCH motif), a G-cleaver (cleaving RNA with a WRN motif) propersessing an NCH motif), a G-cleaver (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably MG^2+.

Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of fone or more therapies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma (NHL), pulky low-grade or folicular NHL, lymphocytic leukaemia, HLV (human immunodeficiency virus) associated WHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma (MCL), immunocytoma in the present cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-argetting nucleic acid may be used to treat a patient having a condition associated with the level of NOGO- The treatment may further comprise the use of one or more (CVA, stroke), Alzheime
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  abiotic stress tolerance; improved nutritional value; hygromycin; primer;
                                                                                                                                                                                                                                         constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Male-sterile plant producing genome altering oligonucleotide #123.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of the invention
                                                                                                                       Chowrira BM;
                                                                                                                                                                                                                                                                                                                                     Claim 30; Page 148; 200pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABK25223 standard; DNA; 17 BP.
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4 UGAUCUUUGCCUU 16
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  RIBOZYME PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence is an inozyme
(RIBO-) RIBOZYME PHARM (BLAT/) BLATT L. (MCSW/) MCSWIGGEN J. (CHOW/) CHOWRIRA B M.
                                                                                                                       Mcswiggen J,
                                                                                                                                                                    WPI; 2001-607195/69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
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                                                                                                                       Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABK25223;
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The invention relates to an oligonucleotide for targeted alteration of a genetic sequence, which comprises a single-stranded oligonucleotide having a DNA domain. The DNA domain has at least one mismatch with respect to the genetic sequence to be altered and further comprises chemical modifications of the oligonucleotide. The chemical modifications of the oligonucleotide. The chemical modifications of the oligonucleotides of the comprises of phosphorothicate linkages on a terminus, or a combination of any two or more of these modifications. The oligonucleotides are useful for more of these modification of plant genetic information. The oligonucleotides are particularly useful for creating plants with desired nutritional value (e.g. alternion amino acid content of plants or conferring amino acid over production), herbicide resistance (e.g. clyphosate resistance, imidazolinome and sulphomylurea herbicide cresistance, modified oil production, modified starch production of waxy starch, alteral content of production of waxy starch, alteral content of content or conference of content or production of waxy starch, alteral content or conference or more of content or production of waxy starch, alteral content or conference or more or conference o
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New oligonucleotides with modified nuclease-resistant termini, useful for creating plants with desired phenotypes, e.g. stress tolerance, improved nutritional value, herbicide or disease resistance, or modified oil
amino acid over production, herbicide resistance, glyphosate resistance, imidazolinone herbicide resistance; sulphonylurea herbicide resistance; porphyric herbicide resistance; triazine resistance; disease resistance; modified oil production, modified starch production, waxy starch; altered floral morphology; male-sterile plant; albino mutant; modified fatty acid content; reduced palmitate production, albino plant; increased stearate production; reduced linolenic acid production;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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30-OCT-2000; 2000US-0244989P.
27-MAR-2001; 2001US-00818875.
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                                                                                                                                                                                                                                                                                                                                                                                                                   photosynthetic process.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYDE ) UNIV DELAWARE.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
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photosynthetic process.
  09-APR-2002
                                           production.
                     Synthetic.
                                   Kmiec EB,
ABK25224;
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Chromosomal genomic alteration, genome altering oligonucleotide, PCR; ss, ob-methyl modification, LNA modification, phosphorothioate linkage, DNA repair, DNA alteration; environmental tolerance; hygromycin-B; abiotic stress tolerance; improved nutritional value, hygromycin, primer, amino acid over production, herbicide resistance; glyphosate resistance; imidazolinone herbicide resistance; sulphonylurea herbicide resistance; porphyric herbicide resistance; triazine resistance; disease resistance; altered floral morphology; male sterile plant; albino mutant; modified fatty acid content; reduced plant; albino mutant; increased stearate production; reduced linolenic acid production; plant; increased stearate production; reduced linolenic acid production;
                                                                                                                              Male-sterile plant producing genome altering oligonucleotide #124.
(first entry)
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Lycopersicon esculentum

WO200192512-A2.

06-DEC-2001

01-JUN-2001; 2001WO-US017672.

01-JUN-2000; 2000US-0208538P. 30-OCT-2000; 2000US-0244989P. 27-MAR-2001; 2001US-00818875.

(UYDE) UNIV DELAWARE

Rice MC, Gamper HB,

Kim J;

WPI; 2002-106307/14.

New oligonucleotides with modified nuclease-resistant termini, useful for creating plants with desired phenotypes, e.g. stress tolerance, improved nutritional value, herbicide or disease resistance, or modified oil

Claim 7; Page 78; 220pp; English.

denotes to the genetic sequence to be altered and further comprises the aving a DNA domain. The DNA domain has at least one mismatch with respect to the genetic sequence to be altered and further comprises chemical modifications of the oligonucleotide. The chemical modifications of the oligonucleotides are useful for more of these modifications. The oligonucleotides are useful for directing repair or alteration of plant genetic information. The oligonucleotides are particularly useful for creating plants with desired cuteritional value (e.g. altering amino acid content of plants or conferring amino acid over production), herbicide resistance (e.g. glyphosate resistance, imidazolinone and sulphonylurea herbicide conferring amino acid content of plants or resistance, modified oil production, modified starch production (e.g. increased starch or production, modified fatty acid content (e.g. male-sterile plants) or modified fatty acid content oligonucleotides are also useful for producing albino mutants for the lysis of photosynthetic processes. This sequence represents a genome of (e.g. reduced palmitate, increased stearate or reduced linolenic acid) The invention relates to an oligonucleotide for targeted alteration altering oligonucleotide of the invention analysis

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Sequence 17 BP; 8 A; 1 C; 2 G; 6 T; 0 U; 0 Other;
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0
                                Gaps
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Score 11.4; DB 1; Length 17;
Pred. No. 7.3e+02;
0; Mismatches 1; Indels
  15.6%;
92.3%;
  Query Match 15.6
Best Local Similarity 92.3
Matches 12; Conservative
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Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                      Human HTPL scanning oligonucleotide SEQ ID 4345.
                                                                                                                                                                                                                                   30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WC-US000669.
93-JAN-2001; 2001WS-03200699.
                                                      ABV83099 standard; DNA; 17 BP
                                                                                                                                                                                                             28-JAN-2002; 2002EP-00001167.
CTICATIGGITIA 951
                                                                                     (first entry)
              15 CTTCATTAGTTTA 3
                                                                                                                                                                                                                                                                                                    (AEOM-) AEOMICA INC.
                                                                                                                                                               Homo sapiens
                                                                                                                                                                             EP1229046-A2
                                                                                                                                                                                                                             30-JAN-2001;
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                                                                                                                                                                                             07-AUG-2002
939
                                                                      ABV83099;
                                       RESULT 224
                                                ABV83099,
                                                        P
8
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Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.

WPI; 2002-676582/73.

Zhan J;

3xample 2; Page 633; 718pp; English.

The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10pl2.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of therapy and manufacture of a medicament for treatment or prevention of the diagnostic and the decreased expression or activity and in the form of the clinically useful diagnostic markers and potental therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are

Sequence 17 BP; 7 A; 4 C; 2 G; 4 T; 0 U; 0 Other;

15.6%; Score 11.4; DB 1; Length 17;

Query Match

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New nucleic acid sequences associated with tumor suppression, regression, apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This sequence represents an isolated nucleic acid sequence associated with tumour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
             ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
tumour regression; apoptosis; virus resistance; diagnosis;
cellular degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ss; tumour suppressor; antitumour; cytostatic; tumour suppression; tumour regression; apoptosis; virus resistance; diagnosis; cellular degeneration.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 2 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
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                                                                                                                                                                                                                                                                   (MOLE-) MOLECULAR ENGINES LAB SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 763; 798pp; French
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                                                                                                                                                                                               20-JUN-2001; 2001FR-00008139
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92.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 92.3
Matches 12; Conservative
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                                                                                         Homo sapiens,
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                                     Gaps
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                                   Indels
. No. 7.3e+02;
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                                 0; Mismatches
                                                                                                                                                                                                                                                                                                      Human tumour suppressor sequence #1818.
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                92.3%; Pred.
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                                                                                                                                                                                               ВЪ.
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Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                                                            ACC53051 standard; DNA; 17
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                                   12; Conservative
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                Best Local Similarity
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Tuijnder M;
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                                                                                                930 ATCCCTCCTCTTC 942
                                                                                                                                                 (first entry)
                                                                                                         Arccercarerre 14
                                                                                        Conservative
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WPI; 2003-250498/25.
                                                                                 Local Similarity
es 12; Conserv
                                                                                                                                                                                                 WO2003025175-A2
                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                             Telerman A,
                                                                                                                                                 12-JUN-2003
                                                                                                                                                                                                          27-MAR-2003
                                                                                                                                        ABT39688;
                                                                               Query Match
                                                                                    Best Loca
Matches
                                                                                                                      RESULT 228
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The
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New nucleic acid sequences associated with tumor suppression, regressapptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 3 A; 6 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                            Claim 1; Page 401; 798pp; French.
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Tumour suppression related human fukutin oligo SEQ ID No 5325.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

(MOLE-) MOLECULAR ENGINES LAB

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 656; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNa. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies

Ξ

Tuijnder

Amson R,

Telerman A,

WPI; 2003-313353/30.

(MOLE-) MOLECULAR ENGINES LAB

17-SEP-2001; 2001FR-00011978.

Disclosure; Page 398; 720pp; French.

and transfected cells.

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production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequence resetuls as components of protein chips. The nucleic acid sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
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                                                                                                                                                                                                                                                                        12; Conservative
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preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheiner's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for disagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nucleic acid molecule, Hepatitis C virus, HCV; Hepatitis B virus, HBV; RNA stability; RNA expression; RNA synthesis, antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
vector or antibodies directed against the polypeptides are useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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08-UUN-2001; 2001US-0087478.
08-UUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
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Roberts E;
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MCSWIGGEN J.
MORRISSEY D.
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Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LEE P.
DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ROBERTS E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAVCO P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200281494-A1.
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Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACD50660;
                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (PAVC/) |
(LEEP/) |
(DRAP/) |
(ROBE/) |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-)
(BLAT/)
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(MCSW/)
(MORR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SULT 230
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The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed cram enricleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV CR as oligonucleotides that specifically bind the Enhancer I region of HBV CR penses and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds compounds and/or potential therapies directed against HBV, and compounds compounds and/or potential therapies directed against HBV, and compounds compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HBV cribozyme, inozyme, cleaver, zinzyme, DNAzyme or amberzyme sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acid molecule, Hepatitis C virus, HCV; Hepatitis B virus; HBV, RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 amberzyme, G-cleaver ribozyme, decoy molecule, aptamer,
HBV reverse transcriptase, Enhancer I region, viral replication,
degenerative, disease state, HBV infection, HCV infection, cirrhosis,
liver failure, hepatocellular carcinoma, hepatotropic, cytostatic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15.6%; Score 11.4; DB 1; Length 17; 30.8%; Pred. No. 7.3e+02; ive 8; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 3 A; 4 C; 1 G; 0 T; 9 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HBV hammerhead ribozyme substrate sequence #182.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                virucide; antiinflammatory; substrate; ss.
                                      Example 1; Page 139; 387pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; 2001US-00817879.
; 2001US-00877478.
; 2001US-0296876P.
; 2001US-0335059P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACD50665 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 907 ATTITCTTIGGIC 919
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4; Conservative
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MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
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MACEJAK D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hepatitis B virus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200281494-A1.
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08-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-JUN-2001;
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(PAVC/)
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(MACE/)
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 231
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ADB44108 standard; DNA; 17 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 useful e.g. for treatment o
polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                    933 CCTCCTCTTCATT 945
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (revised)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-441574/41.
          WPI; 2003-333167/31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 relerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADB44108;
                                                                                                                                                                                                                                                                                                                                                                                                               ADB44108
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                                                                                                                                                                                                                                                                                                                                                           임
                                                                                                                                                                                      The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well ranscriptase and/or HBV reverse transcriptase primer sequences, as well so oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatcoellular carcinome. The present sequence represents a substrate for one of the HBV ribozyme, inozyme, inozyme, zinzyme, bNAzyme or amberzyme sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                           hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Murine oligonucleotide associated with tumour supression, SEQ ID 2172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                  Lee P;
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 11.4; DB 1; Length 17;
Pred. No. 7.3e+02;
8; Mismatches 1; Indels
                                                                                                                Novel compound useful for treating cirrhosis, liver failure
                                                  ñ
                                                  Pavco
                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 1 A; 2 C; 4 G; 0 T; 10 U; 0 Other;
                                                 Mcswiggen J, Morrissey D,
                                                                                                                                                                  Example 1; Page 139; 387pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                 disclosed in the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15.6%;
30.8%;
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Best Local Similarity 30.0.,
A; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC64925 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     911 TCTTTGGTCTTTG 923
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                                                 Macejak D,
Roberts E;
                                                                                        WPI; 2003-229207/22
          DRAPER K.
ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2003025176-A2
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                                      Blatt L, Me
                                                                                                                                           infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACC64925;
            (DRAP/)
(ROBE/)
 LEEP/)
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                                                                                                                                                                                                                                                                                                                                     ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligomucleotides are useful as (1) as probes and primers for detecting, identifying quantifying and/or amplifying nucleic acid, e.g. as one component of gene chip, in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides: The oligomucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
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primer, probe, tumour suppression, tumour reversion, apoptosis;
virus resistance, transgenic animals, Alzheimer's disease, schizophrenia,
New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                 present invention relates to murine oligonucleotides (ACC62754-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fumour suppression/reversion associated nucleotide #4431.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17 BP; 3 A; 6 C; 1 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
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                                                                                                                                                                                                      Disclosure; Page 285; 738pp; French.
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the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing the mucleotides (also vectors containing the mucleotides (also vectors and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or call degeneration (e.g. Alzheimer, s disease or schizophrenia).

Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.

Sequence 17 BP; 2 A; 2 C; 5 G; 8 T; 0 U; 0 Other;

Gaps ö Score 11.4; DB 1; Length 17; Pred. No. 7.3e+02; 0; Mismatches 1; Indels 15.6%; 92.3%; 12; Conservative Similarity Query Match Best Local Matches

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SULT 234

342008/c

ADB42008 standard; DNA; 17

BP.

(first entry) (revised) 18-DEC-2003 04-DEC-2003

ADB42008;

Tumour suppression/reversion associated nucleotide #2331.

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

Homo sapiens.

WO2003040369-A2.

15-MAY-2003,

17-SEP-2002; 2002WO-IB004219.

17-SEP-2001; 2001FR-00011981.

(MOLE-) MOLECULAR ENGINES LAB

Tuijnder M; Amson R, Telerman A,

WPI; 2003-441574/41.

New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

Disclosure; Page 304; 771pp; French.

The invention relates to the isolation of 6327 nucleotide sequences, tragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RMA, of the nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides or the nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour respectation or reversion or reversion, apoptosis and or viral resistence, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and
                                                                                                                                                                                polypeptides can
              suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                              and/or prognosis of these diseases. The nucleotides and polypepticalso be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                       15.6%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.3e+02; ive 0; Mismatches 1; Indels
  and antisense sequences, of nucleotides involved in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tumour suppression/reversion associated nucleotide #5734.
                                                                                                                                                                                                                                                                                 Sequence 17 BP; 9 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 702; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                             expression of the nucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADB45411 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                          905 TCATTTTTTGG 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                       Query Match 15.6
Best Local Similarity 92.3
Matches 12, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                16 rcarrgrcrrrgg 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADB45411;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 235
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or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nuclectides can be used for diagnosis and/or prognosis of these diseases. The nuclectides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours
                                                                                                                                                                                                                                 expression of the nucleotides
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15.6%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.3e+02; Seguence 17 BP; 5 A; 3 C; 1 G; 8 T; 0 U; 0 Other; 0; Mismatches 903 GGTCATTTTCTTT 915 Conservative Query Match Best Local Similarity Matches 12; Conserv

ADB44471 standard; DNA; 17 BP ADB44471; RESULT 236

Tumour suppression/reversion associated nucleotide #4794.

(first entry)

18-DEC-2003

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

Homo sapiens.

WO2003040369-A2

17-SEP-2002; 2002WO-IB004219.

17-SEP-2001; 2001FR-00011981.

(MOLE-) MOLECULAR ENGINES LAB.

Tuijnder relerman A, Amson R,

Σ

WPI; 2003-441574/41.

New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

Disclosure; Page 592; 771pp; French.

The invention relates to the isolation of 6327 nuclectide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for provention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

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Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                          Gaps
                                                                                                                                                                                          .
0
                                                                                                                                                    Length 17;
                                                                                                                                                                                        1, Indels
                                                                                                             Sequence 17 BP; 4 A; 5 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                                                                    15.6%; Score 11.4; DB 1; 92.3%; Pred. No. 7.3e+02;
                                                                                                                                                                                      0; Mismatches
                                                                           expression of the nucleotides.
                                                                                                                                                                                                                              935 TCCTCTTCATTGG 947
                                                                                                                                               Query Match
Best Local Similarity 92.3:
Matches 12; Conservative
                                                                                                                                                                                                                                                                    rccrcrrcarrcs 15
                                                                                                                                                                                                                                                                                                                             RESULT 237
 88888888
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PCR; primer, ss; lung cell proliferative disorder; CpG dinucleotide; adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer; Primer oligo used for analysing CpG islands in genomic DNA (SeqID 901). (first entry) L8-DEC-2003

ADC70411 standard; DNA; 17 BP.

ADC7041

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Gaps

.. 0

1; Indels

ADC70411;

Inidentified

cytosine methylation state.

WO2003052135-A2.

26-JUN-2003.

10-DEC-2002; 2002WO-EP014026.

14-DEC-2001; 2001DE-01061625.

(EPIG-) EPIGENOMICS AG.

Maier Lipscher E, Liloglou T, 'n, Genc Field JK, Nimmrich I; Σ Burger

s;

WPI; 2003-533029/50.

Detecting and differentiating cytosine methylation state of genomic DNA, useful for diagnosing, treating prognosticating and/or monitoring lung cell proliferative disorders e.g. adenocarcinoma and squamous cell carcinoma.

Claim 15; SEQ ID NO 901; 58pp; English.

This invention relates to a novel method for detecting and differentiating between lung cell proliferative disorders associated with at least one gene and/or their regulatory regions. Specifically, it refers to a method comprising contacting a target nucleic acid in a biological sample with at least one reagent, wherein the reagent is able to distinguish between methylated and non-methylated CgG dinucleotides present in the target DNA. As such, it is possible to further differentiate and diagnose medical conditions including adenocarcinoma and squamous cell carcinoma, and their respective adjacent lung tissue. The present invention describes cytostatic oligomers and PNA-oligomers that are useful as probes for determining the cytosine methylation state or single nucleotide polymorphisms (SNPs) of the target sequence. This oligomucleotide sequence is a primer oligomer used for the analysis of CPG positions within genomic DNA, used in an exemplification of the

Sequence 17 BP; 1 A; 8 C; 1 G; 7 T; 0 U; 0 Other;

PCR; primer, ss; lung cell proliferative disorder; CpG dinucleotide; adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer; cytosine methylation state.

Primer oligo used for analysing CpG islands in genomic DNA (SeqID 899)

(first entry)

18-DEC-2003

ADC70409;

ADC70409 standard; DNA; 17 BP.

RESULT 239

ADC70409

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide; adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer; cytosine methylation state; RARB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Detecting and differentiating cytosine methylation state of genomic DNA, useful for diagnosing, treating prognosticating and/or monitoring lung cell proliferative disorders e.g. adenocarcinoma and squamous cell
                                                                              Gaps
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                                                                          ö
   Score 11.4; DB 1; Length 17;
Pred. No. 7.3e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCR primer 2 used to amplify RARB to identify CpG islands.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 3; Page 19; 58pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                ADC70430 standard; DNA; 17 BP.
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   15.6%;
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                                                                                                                                          899 CCCTGGTCATTT 911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                          CCCTGCTCATTT 17
                                                                      12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-533029/50.
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Query Match
Best Local Similarity
Matches 12; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADC70430;
                                                                                                                                                                                                                                                                                                                         SSULT 238
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ŝ Maier

Lipscher E,

Liloglou T,

B

Genc

Field JK,

Burger M, I

WPI; 2003-533029/50.

(EPIG-) EPIGENOMICS AG.

10-DEC-2002; 2002WO-EP014026. 14-DEC-2001; 2001DE-01061625

WO2003052135-A2. Unidentified.

26-JUN-2003.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention relates to a novel method for detecting and differentiating between lung cell proliferative disorders associated with at last one gene and/or their regulatory regions. Specifically, it refers to a method comprising contacting a target nucleic acid in a biological sample with at least one reagent, wherein the reagent is able to distinguish between methylated and non-methylated CpG dinucleotides present in the target DNA. As such, it is possible to further differentiate and diagnose medical conditions including adenocarcinoma and squamous cell carcinoma, and their respective adjacent lung tissue. The present invention describes cytostatic oligomers and PNA-oligomers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      that are useful as probes for determining the cytosine methylation state or single nucleotide polymorphisms (SNPs) of the target sequence. This oligomucleotide sequence is a primer oligomer used for the analysis of CPG positions within genomic DNA, used in an exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Detecting and differentiating cytosine methylation state of genomic DNA, useful for diagnosing, treating prognosticating and/or monitoring lung cell proliferative disorders e.g. adenocarcinoma and squamous cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17 BP; 1 A; 8 C; 1 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 15; SEQ ID NO 899; 58pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA40694 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     899 CCCTGGTCATTTT 911
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5 CCCTGCTCATTT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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Matches 12; Conserv
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Gaps

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Query Match
Best Local Similarity 92.3%; Pred. No. 7.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels

899 CCCTGGTCATTT 911

5 cccrccrcarrr 17

Sequence 17 BP; 1 A; 8 C; 1 G; 7 T; 0 U; 0 Other;

an exemplification of the invention.

(first entry)

04-JUN-1993

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Human, rat, CD36; SHR, spontaneous hypertensive rat; diagnosis; therapy, screening; polyworphism; variant; detection; mutant; blood; mutation; insulin; glucose metabolism; fatty acid metabolism; catecholamine; malaria; infection; parasite; antiparasitic; antidiabetic; primer; ss.
         Human CD36 polymorphism sequence variant oligonucleotide SEQ ID NO:186
                                                                                                                                                                                                                                                                                           Nucleic acids encoding mutant CD36 proteins useful for preventing, diagnosing and treating parasitic infections, especially malaria.
                                                                                                                                                                                                                                                                                                                        Disclosure; Page 95; 167pp; English.
                                                                                                                                                                                                                                                         Stanton LW;
                                                                                                                                                          98US-00167750.
98US-00221222.
99US-00270542.
                                                                                                                                          99WO-US023418
                                                                                                                                                                                                 MEDICAL RES COUNCIL.
                                                                                                                                                                                                                                                        Aitman TJ, Scott J,
                                                                                                                                                                                                                                      STANTON L W.
                                                                                                                                                                                                          SCIOS INC.
AITMAN T J.
                                                                                                                                                                                                                                                                          WPI; 2000-303596/26.
                                                                                                    WO200019883-A2.
                                                                         Homo sapiens.
Synthetic.
                                                                                                                                         07-OCT-1999;
                                                                                                                                                            07-OCT-1998;
                                                                                                                                                                    28-DEC-1998;
17-MAR-1999;
                                                                                                                       13-APR-2000.
                                                                                                                                                                                                                 (AITM/)
(SCOT/)
                                                                                                                                                                                                (MEDI-)
                                                                                                                                                                                                                                     (STAN/)
                                                                                                                                                                                                           (SCIO-)
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The present invention describes isolated nucleic acid molecules (A)
encoding mutant CD36 proteins (B). Parasites such as Plasmodium
classication cause of malaria) are unable to utilise the mutated
proteins to gain entry to, and infect cells. The mutant CD36 proteins do
not function correctly preventing parasites utilising them to infect
calls. The mucleic acids may be used for the recombinant production of
mutant CD36 proteins according to standard methodologies. They may be
used in this way to prevent and treat parasitic infections that utilise
the CD36 protein to infect cells, such as P. falciparum, the major cause
of malaria. For example, the protein may be used to identify modulators
of malaria. For example, the protein may be used to identify modulators
of CD36 expression and activity or a patient's CD36 DNA may be screened
to determine whether there are any mutations present that may confer
cesistance to parasitic infections. The proteins and nucleic acids may
also be used to parasitic infections. The proteins and nucleic acids may
calso be used to parasitic infections. The proteins and vucleic acids may
calso be used to parasitic infections in subjects possessing mutations
in the CD36 genes. AAA40606 to AAA40759, and ABB02515 to AAB02564,
crepresent nucleotide and amino acid sequences respectively which are used
in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 16 BP; 2 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
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20-NOV-1992;
                                                                                                                        32-MAR-1992;
                            WO9318155-A1
Synthetic.
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                                           Gaps
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0
           15.3%; Score 11.2; DB 1; Length 16; 81.2%; Pred. No. 7.6e+02; tive 0; Mismatches 3; Indels
                                                                        936 CCTCTTCATTGGTTTA 951
                                                                                                      16
                                                                                                        CCTATTCTTTGGCTTA
                                         13; Conservative
                           Best Local Similarity
           Query Match
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Matches

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AAQ36488 standard; DNA; 17 BP.

AAQ36488

RESULT 241 AAQ36488 ID AAQ3648 XX AC AAQ3648

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The sequences given in AAO36470-97 are nucleic acid fragments which may be used in a method for detecting mycoplasma. The primers are used to amplify a fragment which is then detected using a probe. The method has good sensitivity, specificity, rapidity and ease of operation
                                                Detection; mycoplasma; primer; PCR polymerase chain reaction; amplify;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Flavonoid-3',5'-hydoxylase; transformation; plants; petunia; rose; tobacco; pigment alteration; blue; SSP; single specific primer; PCR; polymerase chain reaction; amplification; expression; ss.
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0
                                                                                                                                                                                                                                                                           New nucleic acid fragment - useful for detection of mycoplasma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shimada R;
                                                                                                                                                                                                                                                                                                                                                                                                                15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shimada Y, Ohbayashi M,
                                                                                                                                                                                                                                                                                                                                                                                         Seguence 17 BP; 3 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SSP for flavonoid-3',5'-hydroxylase gene.
                                                                                                                                                                                                                                                                                                    Disclosure; Page 14; 16pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (KYOW ) KYOWA HAKKO KOGYO CO LTD.
                                                                                                                                                                                                             (WAKT ) WAKUNAGA SEIYAKU KK.
(DAIN ) DAINIPPON PHARM CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  928 TTATCCCTCCTCTTCA 943
                                                                                                                                                             91JP-00153541.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 Trarcrereference 17
                       Mycoplasma primer/probe 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAQ47888 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 15.3
Best Local Similarity 81.2
Matches 13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (revised)
                                                                                                                                                                                                                                                  WPI; 1993-049152/06.
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                                                                                                            JP05000088-A
                                                                                                                                                           25-JUN-1991;
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28-MAR-1994
                                                                                                                                     08-JAN-1993
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Okinaka Y;
                                                                                     Synthetic.
                                                             probe; ss.
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                                                                                                                             Insertion of the sequences (AAQ47840-42) into plants such as rose, petunia, tobacco and carnation, using a suitable vector such as agrobacterium, give transformed plants which express the gene, resulting in petals with a bluer colour than normal, and/or pigmentation patterns (AAQ47843-70). Related single specific primers using a gene sequence coding for the haem-binding region of cytochrome P450 are shown in (AAQ47871-Q47903). (Updated on 25-MAR-2003 to correct PN field.)
              Gene coding for flavonoid-3',5'-hydroxylase of petunia petals - used to transform plants e.g. petunia, rose or tobacco to give bluer flower colour and altered pigment pattern.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tumour antigen rejection precursor; melanoma antigen-3; MAGE-3; cancer; cytolytic T cells; antigen D; human leucocyte antigen; cell line LB-33-MEL; PCR primer CHO10; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New tumour rejection antigen precursor MAGE3 - useful in treatment and diagnosis of cancer.
                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                           ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Van Der Bruggen
                                                                                                                                                                                                                                                                                                                                                ch 15.3%; Score 11.2; DB 1; Length 17; 1 Similarity 76.5%; Pred. No. 7.9e+02; 13; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Melanoma cell line LB-33-MEL cDNA PCR primer CH0910.
                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 2 A; 5 C; 4 G; 5 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Boon-Falleur T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 32; Page 35; 105pp; English.
                                                                                              62; 82pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (LUDW-) LUDWIG INST CANCER RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                  900 CCTGGTCATTTTCTTTG 916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ccnegecararrerred 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ72496 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93US-00037230.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94WO-US002877
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1994-333192/41.
                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                            Claim 11; Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9423031-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-MAR-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-MAR-2003
23-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaugler B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                         Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Determn. of cancerous condition(s) - using a nucleic acid as a primer to determine expression of a MAGE tumour rejection antigen precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Primers CHO9 and CHO10 (AAT05087-88) correspond to regions of exon 3 of tumor rejection antigen precursor MAGE-1, MAGE-2 and MAGE-3 genes. They were used to amplify human melanoma cell line LB-33-MEL cDNA. A PCR product was obtained that differed from previously identified MAGE 1, 2, 3, 4, and 5 genes, and was named MAGE 6 (AAT01166). (Updated on 25-MAR-2003 to correct PI field.)
                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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Patard J;
                                                                                     0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MAGE-6; melanoma; tumour rejection antigen; cancer; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match 15.3%; Score 11.2; DB 1; Length 17; Local Similarity 81.2%; Pred. No. 7.9e+02; les 13; Conservative 0; Mismatches 3; Indels
                                            Length 17;
                                                                                     3; Indels
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Brasseur F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 6 A; 2 C; 9 G; 0 T; 0 U; 0 Other;
Sequence 17 BP; 6 A; 2 C; 9 G; 0 T; 0 U; 0 Other;
                                       15.3%; Score 11.2; DB 1;
81.2%; Pred. No. 7.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           De Plaen E, Boon-Falleur T, Lethe B, Szike
Chomez P, Gaugler B, Van Den Eynde B, Bra:
Weynants P, Marchand M, Van Der Bruggen P;
                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 polymerase chain reaction; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 32; Page 35; 121pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (LUDW-) LUDWIG INST CANCER RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94US-00204727.
94US-00209172.
94US-00299849.
94US-00346774.
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                                                                                                                                                                                                                                                                                         BP.
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                                                                                                                               927 TTTATCCCTCCTTTC 942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95WO-US002203
                                                                                                                                                         16 TIGGCCCTCCTCTTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rregececercererre 1
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                                                                                                                                                                                                                                                                                         AAT05088 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                     13; Conservative
                                                                                                                                                                                                                                                                                                                                                                               (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                MAGE PCR primer CHO10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1995-320586/41.
                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                            25-MAR-2003
18-MAR-1996
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10-MAR-1994;
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Best Local S:
Matches 13
                                                                                                                                                                                                                                                                                                                                       AAT05088;
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                                                                                                                                                                                                                                            RESULT 244
AAT05088/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 245
                                                                                     Matches
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ID AAT83
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W09531541-A2

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The present sequence represents the preferred target sequence for an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the human c-myb sequence at the base position indicated in the descriptor line. The c-myb sequence was screened for optimal ribozyme target sites using a computer folding algorithm, and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes cleave the c-myb sequence and can be used to prevent smooth muscle cell and in cancers
                                                                                                                                                                                                                                                                                                                                                                                                                          enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
                                                                       hammerhead ribozyme target sequence (nt. position 991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human; smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb; coronary angioplasty; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human c-myb hammerhead ribozyme target sequence (nt. position 992)
                                                                                                Enzymatic nucleic acid, hammerhead, ribozyme, cleavage, human, smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 5 A; 2 C; 4 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                          treating restenosis or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 67; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT81161 standard; RNA; 17 BP
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                                                                                                                                                                                                                                                        95WO-US006368.
                                                                                                                                                                                                                                                                                      94US-00245466.
95US-00373124.
                                                                                                                                                                                                                                                                                                                                   (RIBO-) RIBOZYME PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                              Stinchcomb DT, Draper K,
                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 TTACATGTAACGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                 coronary angioplasty; ss
                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1996-010927/01.
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nes 13; Conser
                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                            WO9531541-A2
                                                                                                                                                                                                                                                        18-MAY-1995;
                                                                                                                                                                                                                                                                                      18-MAY-1994;
                                                                                                                                                                                                                                                                                                   13-JAN-1995;
                                                                       Human c-myb
                                          29-SEP-1997
                                                                                                                                                                                                                          23-NOV-1995
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            AAT81160
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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CP
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Mcswiggen J, Jarvis T;

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The present sequence represents the preferred target sequence for an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the human c-myb sequence at the base position indicated in the descriptor line. The c-myb sequence was screened for optimal ribozyme target sites using a computer folding algorithm, and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes cleave the c-myb sequence and can be used to prevent smooth muscle cell hyperproliferation in restenosis, especially after coronary angioplasty,
                                                                                                                                                                                                                        enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human c-myb hammerhead ribozyme target sequence (nt. position 2779).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Enzymatic nucleic acid, hammerhead, ribozyme; cleavage, human;
smooth muscle cell, hyperproliferation; restenosis; cancer; c-myb;
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                                                                                                                                                              Jarvis T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Draper K, Mcswiggen J, Jarvis T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 6 A; 2 C; 4 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15.3%; Score 11.2; DB 1;
81.2%; Pred. No. 7.9e+02;
cive 0; Mismatches 3;
                                                                                                                                                              Draper K, Mcswiggen J,
                                                                                                                                                                                                                                         for treating restenosis or cancer.
                                                                                                                                                                                                                                                                      Claim 1; Page 67; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT81530 standard; RNA; 17 BP.
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                                                           95WO-US006368.
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                                                                                      94US-00245466.
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                                                                                                                                  (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-DEC-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   coronary angioplasty; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13; Conservative
                                                                                                                                                                                          WPI; 1996-010927/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                              Stinchcomb DT,
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                                                                                                    13-JAN-1995;
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                                                          18-MAY-1995;
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                             23-NOV-1995
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Best Local
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Gaps

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15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; ative 0; Mismatches 3; Indels

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Homo sapiens

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schultz1-899.rng

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Gaps

0;

Length 17;

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Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
receptors of vascular endothelial growth factor (VBGF). A patient (preferably human) having a condition associated with the level of the fms-like typosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67575 to AAX57575 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human flt1 VEGF receptor hammerhead ribozyme substrate #1419.
                                                                                                                                                                                                                                                15.3%; Score 11.2; DB 1; Length 181.2%; Pred. No. 7.9e+02; cive 0; Mismatches 3; Indels
                                                                                                                                                                                                    Sequence 17 BP; 9 A; 3 C; 3 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; Page 89; 218pp; English.
                                                                                                                                                                                                                                                                                                                                        909 TITCTTTGGTCTTTGC 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX70124 standard; RNA; 17 BP.
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96US-00584040.
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                                                                                                                                                                                                                                                                                            13; Conservative
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                                                                                                                                                                                                                                                                       Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9715662-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-OCT-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-OCT-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX70124;
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                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                            Matches
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    8888888888888
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                                                                                                                                                 The present sequence represents the preferred target sequence for an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the human c-myb sequence at the base position indicated in the descriptor line. The c-myb sequence was screened for optimal ribozyme target sites using a computer folding algorithm, and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesized and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes cleave the c-myb sequence and can be used to prevent smooth muscle cell hyperproliferation in restenosis, especially after coronary angioplasty, and in cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; MSGF, hammerhead tibozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more
                                           New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb, for treating restenosis or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic acid molecule modulating VEGF receptor(s) gene expression or stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human flt1 VEGF receptor hammerhead ribozyme substrate #119.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity 37.5%; Pred. No. 7.9e+02; Similarity 7.5%; Pred. No. 7.9e+02; 6; Conservative 7; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stinchcomb D, Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 3 A; 3 C; 4 G; 0 T; 7 U; 0 Other;
                                                                                                          Claim 1; Page 77; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 4; Page 50; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAX68824 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 913 TTTGGTCTTTGCCTTT 928
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96US-00584040.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1997-259017/23.
  WPI; 1996-010927/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens,
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11-JAN-1996;
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AAX68824

SULT 248 X68824/c

Matches

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The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a growth factor (VEGF). A patient fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, coular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                          Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
     Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 2 A; 4 C; 1 G; 0 T; 10 U; 0 Other;
Stinchcomb D,
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Pavco P,

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cleaving activity (e.g. ribozymes) which are capable of modulating the expression of plant genes: (i) involved in biosynthesis of alkaloids; or (ii) involved in flower formation. AAV95982 to AAV96334, and AAV9635 to AAV96354 represent potato solanidine glucosyltransferase hammerhead and hairpin ribozymes, respectively, AAV95629 to AAV95991, and AAV96355 to AAV96734 represent potato solanidine glucosyltransferase target sequences. AAV96773 to AAV97170, and AAV97171 to AAV97195 represent potato citrate synthase hammerhead and hairpin ribozymes, respectively. AAV96735 to AAV96772, and AAV97196 to AAV97195 represent potato citrate synthase target sequences. Ribozymes of the present invention can be used to inhibit the synthesis of toxic alkaloids in solanaceous plants, particularly potato but also tomato, pepper, aubergine and ditura or to inhibit flowering in potato, lettuce, spinach, cabbage, brussel sprouts, arugula, kale, collards, chard, beet, turnip, sweet potato and turf grass. Also the ribozymes can be used for RNA manipulation in the same way that restriction endonucleases are for DNA, as well as to examine seneity drift and mutations in plants and to detect specific RNA. The ribozymes can be targeted to specific genes or to consensus sequences within a family of related genes, and being catalytic need to be present
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                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                          Solanidine; glucosyltransferase; potato; citrate synthase; target; hammerhead ribozyme; hairpin ribozyme; alkaloid biosynthesis; flower formation; cleavage; solanaceous plant; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New enzymatic nucleic acid(s) - useful for, e.g. reducing alkaloid
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15.3%; Score 11.2; DB 1; Length 17; 25.0%; Pred. No. 7.9e+02; ive 9; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 3 A; 2 C; 1 G; 0 T; 11 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        biosynthesis or regulating flowering.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 13; Page 46; 79pp; English.
                                                                                 907 ATTITCTITGGICTIT 922
                                                                                                                                                                                                                            AAV95714 standard; RNA; 17 BP
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97US-00979416.
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                                                                                                                     2 AUAUUCUCUGCUCUUU 17
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                                                                                                                                                                                                                                                                                                           (first entry)
                                        4; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1998-427939/36.
  Query Match
Best Local Similarity
Matches 4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Solanum tuberosum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9832843-A2
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24-NOV-1997;
                                                                                                                                                                                                                                                                                                           01-MAR-1999
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                                                                                                                                                                                   RESULT 250
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The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl contembron muclear transporter (ARNY) gene, an integrin subunit beta 3 gene, and AAA1762 to AAA1762 represent ribozyme sequences for Tie-2 gene. AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to AAA19155 to AAA19155 to AAA19155 to AAA19155 to AAA19155 to AAA19155 to AAA19086 and AAA19152 to AAA19155 to AAA19087 to AAA19153 to AAA19030 and AAA1903 to AAA2168 represent their corresponding target sequences; AAA1923 to AAA2168 represent their corresponding target sequences; AAA21699 to AAA2168 represent their corresponding target sequences; AAA21699 to AAA2168 represent their corresponding target sequences; AAA21422 represent their corresponding target sequences; AAA21422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNY.

Corresponding angiogenic factor, especially ARNY, age related macular degeneration (ARMO), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, dother syndromes and diseases related to the levels of ARNI, Tie-2, integrin subunit alpha-6, or the levels of ARNI, Tie-2, integrin subunit beta-3 in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel ribozymes for modulating the synthesis, expression and/or stability
                                                                                                                                                                                                                                                                                                                                                                                           Human; aryl hydrocarbon nuclear transport, ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic, antinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Coeshott C, Mcswiggen JA,
                                                                                                                                                                                                                                                                                                                                            Human TIE-2 substrate sequence SEQ ID NO:1785.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of an mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 56; Page 102; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Jarvis T,
907 ATTTTCTTTGGTCTTT 922
                                                                                                                                                                                  AAA18559 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99WO-US006507.
                              2 AUTUTUTAUGCUCUTU 17
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                                                                                                                                                                                                                                                                                        (first entry)
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                                                                                                                           RESULT 251
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Gaps

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Query Match 15.3%; Score 11.2; DB 1; Length 17; Best Local Similarity 18.8%; Pred. No. 7.9e+02; Matches 3; Conservative 10; Mismatches 3; Indels

schultz1-899.rng

0

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3; Indels

Query Match

Matches

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capable of modulating a process in a biological system. The method comprises: (a) introducing into the system a random library of nucleic acid catalysts (NAC) having a bubtrate binding domain (SBD), comprising a random sequence, and a catalytic domain (CD); and (B) identifying NAC in systems where modulation has occurred and/or determining the sequence of at least part of the SBDs in such systems. Nucleic acid molecules with endonuclease activity and catalytic activity, from the present invention, are used to modulate gene expression in plant and mammalian cells and to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, c-raf, A-raf, B-raf, hammerhead ribozyme; hairpin ribozyme;
target; substrate; catalyst; modulation; expression; Raf gene; delivery;
screening; identification; synthesis; deprotection; purification; cancer;
inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
restenosis; rheumatoid arthritis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Identifying new catalytic nucleic acid that modulates selected processes respecially ribozymes that cleave Raf RNA for treating cancer, restenosis, and also hew ribozymes and modified nucleoside triphosphates used as antiviral agents and synthons.
   angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A method has been developed for the identification of a nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K,
Parry T, Beigelman L, Mcswiggen JA, Karpeisky A,
Thompson J, Workman CT, Beaudry A, Sweedler D;
                                                                                        integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                               Sequence 17 BP; 2 A; 1 C; 2 G; 0 T; 12 U; 0 Other,
                                                                                                                                                                                                         Score 11.2; DB 1;
Pred. No. 7.9e+02;
0; Mismatches 3;
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97US-0051718P.
97US-0056808P.
97US-0061321P.
97US-0061324P.
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                                                                                                                                                                                                                                    18.8%;
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                                                                                                                                                                                                                                                                   3; Conservative
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                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 3; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-FEB-1999
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09-JUN-1997;
03-JUL-1997;
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02-OCT-1997;
02-OCT-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 253
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                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNY) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA1762 represent ribozyme sequences for ARNT, and AAA17168 to AAA1762 to AAA1762 to AAA1762 sequences for Tie-2, and AAA1987 to AAA19154 represent ribozyme sequences for Tie-2, and AAA1988 to AAA1986 and AAA19155 to AAA19222 represent their corresponding target sequences; AAA19154 represent ribozyme sequences for Tie-2, and AAA1988 to AAA1986 and AAA1985 to AAA1985 to AAA1985 to AAA1985 sequences for integrin alpha 6 subunit, and AAA21952 represent ribozyme sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and AAA21596 to AAA2168 represent their corresponding target sequences; AAA21595 to AAA21575 and AAA23363 to AAA23322 AAA2333 and AAA23422 represent their subunit beta 3, and AAA23362, AAA23343 to AAA23422 represent their orresponding target sequences for integrin subunit beta 3, and AAA23476 to AAA23362, AAA23343 to AAA23422 represent their orresponding target sequences for integrin subunit beta 3, and AAA23476 to AAA23322, AAA23343 to AAA23422 represent their orresponding target sequences for integrin subunit beta 3, and AAA2362, expression and/or the invention are used for modulating the synthesis, expression and/or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiatrhritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriaais; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
                                                                                                                      Gaps
                                                                                                                   ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mcswiggen JA;
                                                      Match 15.3%; Score 11.2; DB 1; Length 17; Local Similarity 62.5%; Pred. No. 7.9e+02; es 10; Conservative 3; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Integrin alpha 6 subunit substrate sequence SEQ ID NO:3985.
Sequence 17 BP; 4 A; 4 C; 5 G; 0 T; 4 U; 0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 55; Page 165; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Jarvis T,
                                                                                                                                                                          971
                                                                                                                                                                                                                                                                                                                                                                                    AAA20759 standard; RNA; 17 BP
                                                                                                                                                                                                                                 2 Aucecuuccaaecauc 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0079678P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                          956 ATCGCTACCAACGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-591315/50.
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WO9950403-A2

07-0CT-1999

19-JUN-2000

AAA20759;

SULT 252

27-MAR-1998;

Burgin A;

16 TIGGCCCCTCCTCTTC

RESULT

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                     caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic ascites and infection. They may also be used to detect genetic drift and mutations in diseased cells and to determine c-raf RNA. Specifically NACS with RNA-cleaving activity that modulate expression of the Raf gene, are used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or generally any condition associated with the level of c-raf. Introduction of sugar/phosphate modifications increases stability against nuclease and activity. AAV930922 to AAV93877 represent NACs that can be used in the method, specifically for modulating the expression of a Raf gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This sequence represents a PCR primer for the MAGE gene exon3. The invention relates to a tumour rejection antigen sequence that is useful as a tumour rejection antigen for vaccination against cancerous
cleave target nucleic acid, particularly for treating systemic diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New tumour rejection antigen is useful as a vaccine against cancerous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            De Plaen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tumour rejection antigen; vaccine; cancer; MAGE; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                               15.3%; Score 11.2; DB 1; Length 17; 43.8%; Pred. No. 7.9e+02; ative 6; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Boon T,
                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 3 A; 5 C; 3 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bruggen P, Traversari C, Lurquin C, A, Chomez P, Van Den Bynde B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 32; Col 21; 58pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCR primer for MAGE gene exon 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           91US-00705702.
91US-00728838.
91US-00764365.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX84106 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        934 CTCCTCTTCATTGGTT 949
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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Best Local Similarity 43.0%
T; Conservative
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09-JUL-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX84106;
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Van Pel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 254
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A method has been developed for detecting the presence or absence of a single nucleotide polymorphism (SNP) allele in a genomic sample. The method comprises preparing a reduced complexity genome (RCG) from the genomic sample and analysing the RCG for the presence or absence of a SNP allele. The method can be used to characterise a tumour, to generate a genomic pattern for an individual genome or to generate a genomic classification code for a genome. The method can be used to assess whether a subject is at risk for developing a disease or to identify a set of SNP alleles associated with a disease. The method can also be used to perform linkage analysis. AAA35944 to AAA35947 represent sequences used in the exemplification of the present invention. AAA35948 to AAA36632 represent nucleotide sequences containing SNPs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Detection of single nucleotide polymorphisms in genomes by preparation and analysis of reduced complexity genomes, useful for genotyping, fingerprinting and determining allele frequency of SNPs.
                                                                                                                                                                                                                                                                                                                Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis; allele specific ollogonucleotide; ASO; reduced complexity genome; RCG; genomic classification; identification; by fingerprinting; tumour characterisation; hybridisation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                              Human genomic SNP allele specific oligonucleotide SEQ ID NO:601.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Charest A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MASI ) MASSACHUSETTS INST TECHNOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hammerhead ribozyme substrate #1761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 71; 111pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Housman DE,
                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         922 TGCCTTTTATCCCTCC 937
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US022283.
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                                 AAA36536 standard; DNA; 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-SEP-1998;
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                                                                                                      AAA36536;
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Gaps

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15.3%; Score 11.2; DB 1; Length 17; ilarity 81.2%; Pred. No. 7.9e+02; Conservative 0; Mismatches 3; Indels

Local Similarity les 13; Conserv

Best Loca Matches

Query Match

927 TITAICCCTCCTCTTC 942

Sequence 17 BP; 6 A; 2 C; 9 G; 0 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
Ribozyme; erythropoietin; granulocyte colony stimulating factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ribozyme; erythropoietin; granulocyte colony stimulating factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; 1ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 2 A; 2 C; 3 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hammerhead ribozyme substrate #2209.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  926
                                                                                                                                                                                                                     2000WO-US009721
                                                                                                                                                                                                                                                                  99US-0129390P.
                                                                                                                                                                                                                                                                                                                                                                Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rrrrgarcrirgcer 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000WO-US009721
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                                                                                                                                                                                                                                                                                                                (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAF04693 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                911 TCTTTGGTCTTTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 4; Page 96; 164pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          interferon alpha; ss.
                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-647423/62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zwick M,
                                                                                                                                                                                                                                                                                                                                                                Zwick M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                         interferon alpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    interferon alpha
                                                                                                                    WO200061729-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200061729-A2.
                                                                       Homo sapiens,
                                                                                                                                                                                                                11-APR-2000;
                                                                                                                                                                                                                                                                  12-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-APR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-APR-1999;
                                                                                                                                                                     19-OCT-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S:
Matches 13,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Н
                                                                                                                                                                                                                                                                                                                                                                Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAF04693
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                                                                                                                                                                                                                                                     The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, ERR3/COUP-TF-1, the GATA transcription factor gene, IRR-2 and/or the CAATI Displacement Protein (CDP). Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of erythropoietin, granulocyte colony stimulating factor protein and interferon alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention provides nucleic acid molecules capable of downregulating the expression of the human checkpoint kinase-1 (Chkl) gene. These may be antisense or ribozyme sequences, and are useful in the treatment of diseases associated with conditions affected by Chkl levels, including cancer. The present sequence is an oligonuclectide described in the exemplification of the invention
                                                            Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid molecules, which downregulates expression of a checkpoint kinase-1 gene, useful for treating colorectal, lung, breast or prostate cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 11.2; DB 1; Length 17;
Pred. No. 7.9e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Holman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 2 A; 2 C; 3 G; 10 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human Chk1 ribozyme substrate SEQ ID NO: 562.
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                                                                                                                                                                                            Claim 4; Page 106; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 4; Page 64; 115pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 926
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81.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RNA cleavage; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jarvis T,
WPI; 2000-647423/62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (FATT/) FATTAEY A R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-496922/54.
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hes 13; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-AUG-2001
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ID AAH65137

XX AC AAH6

XX XX HUUM

XX KW RNA

XX KW RNA

XX XX COS GPD

CCC GPD

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Homo sapiens.
                                                                                                                                                            16-AUG-2001
                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                           Blatt L,
                                                                                                                                                                                                                                RIBO-)
                                                                                                                                                                                                                                                           CHOM/)
                                                                                                                                                                                                                                         BLAT/)
                                                                                                                                                                                                                                                 (MCSM/)
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                                                                                                                                                                                                                                                                                                                                                                                                  The present invention provides nucleic acid molecules capable of downregulating the expression of the human checkpoint kinase-1 (Chkl) gene. These may be antisense or ribozyme sequences, and are useful in the treatment of diseases associated with conditions affected by Chkl levels, including cancer. The present sequence is an oligonucleotide described in
                                                                                                                                                                                                                                                                                                                                                          molecules, which downregulates expression of a checkpoint kinase-1 gene, useful for treating colorectal, lung, breast or prostate cancers.
                                                                                                                                                                                                                                                                                                                                                  Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                  Gaps
                                                                                                                                                                     checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                  0
                                                                                                                                                                                                                                                                                                              Holman PS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 17;
15.3%; Score 11.2; DB 1; Length 17; 37.5%; Pred. No. 7.9e+02; ive 7; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; Indels
                                                                                                                                                                                                                                                                                                              Mcswiggen J, Booher RN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 3 A; 4 C; 2 G; 0 T; 8 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15.3%; Score 11.2; DB 1; 37.5%; Pred. No. 7.9e+02;
                                                                                                                                                   Human Chk1 ribozyme substrate SEQ ID NO: 1083.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                 the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human CD20 Hammerhead ribozyme #273.
                                                                                                                                                                                                                                                                                                                                                                                    Claim 4; Page 80; 115pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7;
                                                                                                AAH95658 standard; RNA; 17 BP
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                                    900 CCTGGTCATTTTCTTT 915
                                                                                                                                                                                                                                                  02-FEB-2001; 2001WO-US003504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCUGAUCAUAUGCUUU 17
                                              2 CCUGAUCAUAUGCUUU 17
                                                                                                                                                                                                                                                                   03-FEB-2000; 2000US-0179983P
        Similarity 37.5%;
6; Conservative
                                                                                                                                                                                                                                                                                     RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABK02974 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                             RNA cleavage; cancer; ss
                                                                                                                                                                                                                                                                                                              Jarvis I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                              FATTAEY A R.
                                                                                                                                                                                                                                                                                                                              WPI; 2001-496922/54
 Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                WO200157206-A2.
                                                                                                                                                                                                Homo sapiens.
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                                                                                                                                  09-OCT-2001
                                                                                                                                                                                                                                                                                                               Fattaey AR,
                                                                                                                                                                                                                                 09-AUG-2001
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                                                                                                                 AAH95658;
                                                                                                                                                                                                                                                                                     RIBO-)
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                                                                               RESULT 259
                                                                                        AAH95658
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The invention relates to a nucleic acid molecule which down cequiates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acid may be an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NNN motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a NNN motif) proposessing an NCH motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg<sup>2</sup> +. CC Furthermore, it may be contacted with a cell to reduce CD20 activity of the coff collor. The treatment may further comprise the use of one or more the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more the call and treatment in the CD20 targetting nucleic acid mit having a level of LNGO-collor lawmone (NHL), bulky low-grade or follicular NHL, lymphoma, leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MLL), immunocytoma [IMC), small B-cell lymphocytic lymphoma (MLL), immunocytoma (MLL), immunocytoma (MLL), small B-cell lymphocytic lymphoma (MLL), immunocytoma (MLL), small B-cell lymphocytic lymphoma (MLL), immunocytoma (MLL), small B-cell lymphocytic lymphocytic cargetting nucleic acid with the NoGO-targetting nucleic acid may
Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; noctropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; d-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Bodgkin; s lymphoma; MHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a nucleic acid molecule which down regulates
                                                                                                                                                                                                                                                                                                                                                                                                       inflammatory arthropathy, central nervous system injury; cerebrovascular accident, CVA, Alzabimer's disease; multiple scleros chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease, ataxia; Huntington's disease;
                                                                                                                                                                                                                                                                                                                                                        immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence is a hammerhead ribozyme of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 30; Page 144; 200pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                central nervous system injury.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MCSWIGGEN J.
CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-607195/69.
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Gaps
                                                                        ;
0
                                     Length 17;
                                                                      Indels
Sequence 17 BP; 2 A; 1 C; 1 G; 0 T; 13 U; 0 Other;
                                  15.3%; Score 11.2; DB 1; 18.8%; Pred. No. 7.9e+02;
                                                                    10; Mismatches
                                                                                                                                                                                                                            ABK02975 standard; RNA; 17 BP
                                                                                                      907 ATTITCTTIGGICTTI 922
                                                                                                                        |:::: |:: | :: | 2 AUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU 17
                                                                      3; Conservative
                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                            ABK02975;
                                                                    Matches
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Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; noctropic; neuroprotective; antiparkinsonian; muscular; D20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-Gleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease. chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease;

Human CD20 Hammerhead ribozyme #274.

(first entry)

12-MAR-2002

09-FEB-2001; 2001WO-US004273. 11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P. RIBOZYME PHARM INC. CHOWRIRA B M. MCSWIGGEN J. BLATT L. WO200159103-A2. Homo sapiens. 16-AUG-2001. Synthetic. (CHOM/) (RIBO-) (BLAT/) (MCSM/)

Chowrira BM; Blatt L, Mcswiggen J,

WPI; 2001-607195/69.

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

Claim 30; Page 144; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNAzyme) an Inozyme (an endolytic nucleic acids (leaving a nn RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with at NGN triplet), a sinzyme (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg^22+.

CC Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more theory. The treatment may further comprise the use of one or more theory in particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin; slymphoma (MLL), bulky low-grade or follicular NHL, lymphocytic lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immunocytoma (IMC), small B-cell lymphocytic lymphoma, commune thrombocytopennia, and inflammatory arthropathy. The NOGO-targetting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably Mg²2⁴ +. Furthermore, the uncleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more cell and treat a patient having a condition associated may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), parkinson's disease, muscular dystrophy, and/or toher neurodegenerative disease cataria, Huntington's disease, creutzfeld-Jakob states the model attent of NOGO expression. The present states which respond to the modulation of NOGO expression. The present sequence is a hammerhead ribozyme of the invention 88666666666666666666666888

Sequence 17 BP; 2 A; 1 C; 1 G; 0 T; 13 U; 0 Other;

Gaps 0; 15.3%; Score 11.2; DB 1; Length 17; 18.8%; Pred. No. 7.9e+02; ative 10; Mismatches 3; Indels 907 ATTTTCTTTGGTCTTT 922 Conservative Query Match Best Local Similarity Matches ઠ

.. 0

ABK03537 standard; RNA; 17 BP. 12-MAR-2002 (first entry) Human CD20 Zinzyme #88. ABK03537; RESULT 262 ABK03537 В

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; notropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOG0; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; blacil lymphoma; non-Hodgxin's lymphoma; NHL; lymphoma; leukaemia; human immunodeficiency virus; HIV associated NHL; mantle—cell lymphoma; MCL; immunocytoma; RK; immunot; hronbocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P. 09-FEB-2001; 2001WO-US004273 RIBOZYME PHARM INC. (BLAT/) BLATT L. (MCSW/) MCSWIGGEN J. WO200159103-A2. sapiens. 16-AUG-2001. Synthetic. (RIBO-) Ношо

schultz1-899.rng

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(CHOW/) CHOWRIRA B M.
 Blatt L,
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.; 0 15.3%; Score 11.2; DB 1; Length 17; 43.8%; Pred. No. 7.9e+02; Ative 6; Mismatches 3; Indels Sequence 17 BP; 4 A; 2 C; 4 G; 0 T; 7 U; 0 Other; 7; Conservative Best Local Similarity Matches

939 CTTCATTGGTTTAATG 954 ें

ABN07091 standard; DNA; 17 BP 29-MAY-2002 (first entry) ABN07091; ABN07091/c

Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7083.

Human, genome-derived myosin-like protein 1, GDMLP-1, hGDMLP-1, heart, muscle, myosin, chromosome 22, gene therapy, vaccine, heart disease, skeletal muscle disorder; amplicon, screening, ss.

WO200192524-A2

Homo sapiens.

New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser descrption ionization, comprises human myosin-like protein hGDMLP-1. Disclosure; SEQ ID NO 7083; 214pp; English 30-JAN-2001; 2001WO-US000662. 30-JAN-2001; 2001WO-US000663. 30-JAN-2001; 2001WO-US000664. 30-JAN-2001; 2001WO-US000665. 30-JAN-2001; 2001WO-US000666. 30-JAN-2001; 2001WO-US000667. 30-JAN-2001; 2001WO-US000668. 30-JAN-2001; 2001WO-US000669. 30-JAN-2001; 2001WO-US000661 25-MAY-2001; 2001WO-US016981 Gu Y, Ji Y, Penn SG, (AEOM-) AEOMICA INC. WPI; 2002-179446/23. 04-OCT-2000; 36-DEC-2001 regulates expression of a collice acid molecule which down regulates expression of a collice acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids melocule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving an RNA with a NNN motif) property of cleaving RNA with an NGN triplel), a intryme (cleaving RNA with a NGN motif). The CD20-targetting nucleic acid is used to cleave RNA with a vGY motif). The CD20-targetting nucleic acid is used to cleave RNA coff CD20 in the presence of a divalent cation that is preferably Mg²+. Furthermore, if may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphoma, leukaemia, B-cell lymphoma, leukaemia, B-cell lymphomy architopytic lymphoma, immune thrombocytopeania, and inflammatory arthropathy. The NOGO gene in the presence of a divalent cation that is preferably Mg²/+. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, disconding a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-tragetting nucleic acid may be used to therapies or particular, the NOGO-tragetting nucleic acid may be used to therapies. In particular, disconding decentral acceptance disconding decentral acceptance disconding decentral acceptance disconding Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and (CVA, stroke), Alzheimer's disease, dementia, miltiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, cuerzfeld-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present The invention relates to a nucleic acid molecule which down regulates sequence is a zinzyme molecule of the invention Chowrira BM; Claim 30; Page 155; 200pp; English. central nervous system injury. Mcswiggen J,

Chen W,

Hanzel DK, Rank DR,

2001US-0266860P

2000GB-00024263

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as production and in patients having specific deficiency in hGDMLP-1 proteins. production, and in vaccines or for replacement therapy. The polynucleotide sequences encoding hGDMLD-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. . 0 Gaps

Gaps ·. 15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; ive 0; Mismatches 3; Indels Sequence 17 BP; 6 A; 2 C; 9 G; 0 T; 0 U; 0 Other; 934 CTCCTCTTCATTGGTT 949 13; Conservative Query Match Best Local Similarity Matches ò

The sequence data for this parent did not form part of the printed specification, but was obtained in electronic format directly from WIPO

at ftp.wipo.int/pub/published_pct_sequence

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ABN07092 standard; DNA; 17 BP ABN07092; RESULT 264 ABN07092, a x x x

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(first entry)
 29-MAY-2002
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Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7084.

Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle, myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.

Homo sapiens.

WO200192524-A2.

06-DEC-2001

25-MAY-2001; 2001WO-US016981

26-MAY-2000;

21. SEP-2000; 2000US-02345879.
27. SEP-2000; 2000US-02345879.
04-0CT-2000; 2000US-02345899.
04-0CT-2000; 2000US-0234599.
30-JAN-2001; 2001WO-US000661.
30-JAN-2001; 2001WO-US0006663.
30-JAN-2001; 2001WO-US0006663.
30-JAN-2001; 2001WO-US0006666.
30-JAN-2001; 2001WO-US0006666.

30-JAN-2001; 2001WO-US000669. 2001US-0266860P 05-FEB-2001;

(AEOM-) AEOMICA INC.

Chen W, Rank DR, Hanzel DK, Gu Y, Ji Y, Penn SG,

WPI; 2002-179446/23.

Shannon ME;

New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.

Disclosure; SEQ ID NO 7084; 214pp; English.

Nucleic acid encoding human UDP-GalNAc:polypeptide N-cetylgalactosaminyltransferase 10 protein is useful to diagnose, prevent and treat disorders associated with reduced or over expression of the

Example 2; SEQ ID NO 528; 59pp; English.

encoded protein.

The present invention describes an isolated nucleic acid (I) encoding a human UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 10 (pp-GaNTase 10, BC 2.4.1.41) protein. Human pp-GaNTase 10 is located to chromosome 7q11.2. (I) can be used in gene therapy. Molecules of the present invention can be used in therapy, particularly to prevent or treat a disorder associated with decreased expression or activity of pp-GaNTase. The sequences given in ABV85011 to ABV86689 and ABP53502 to ABP53504 are given in the exemplification of the present invention. N.B. The sequence data for this patent is not represented in the printed present of the present invention.

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as specifically recognise hGDMLP-1 proteins, as specifically of hGDMLP-1 proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionization, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The polymucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO ftp.wipo.int/pub/published_pct_sequence

Sequence 17 BP; 6 A; 3 C; 8 G; 0 T; 0 U; 0 Other;

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Gaps

.. 0

15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; ive 0; Mismatches 3; Indels

81.2%;

13; Conservative

Matches

Best Local Similarity

Query Match

929 TATCCCTCCTCTTCAT 944

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2 TATCCATCATATTCAT 17

Sequence 17 BP; 6 A; 4 C; 0 G; 7 T; 0 U; 0 Other;

European Patent Office

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Query Match 15.3%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 7.9e+02; Matches 13; Conservative 0; Mismatches 3; Indels
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Human, UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 10; pp-GaNTase 10; EC 2.4.1.41; chromosome 7q11.2; gene therapy; scanning;
                                                                                                    Human pp-GaNTase 10 scanning 17-mer SEQ ID NO:528.
                                                                                                                                                                                                                                30-JAN-2001; 2001MO-US000664.
30-JAN-2001; 2001MO-US000665.
30-JAN-2001; 2001MO-US000666.
30-JAN-2001; 2001MO-US000667.
30-JAN-2001; 2001MO-US000668.
30-JAN-2001; 2001MO-US000669.
                                                      BP.
934 CICCICITCALIGGIT 949
                                                                                                                                                                                                         25-JAN-2002; 2002EP-00001161
                                                                                                                                                                                                                         2001WO-US000663
                                                                                                                                                                                                                                                                                        23-MAY-2001; 2001US-00864761
                                                                                                                                                                                                                                                                                              30-AUG-2001; 2001US-0315984P
                                                     ABV85535 standard; DNA; 17
        16 CTCCTCCTTGGCT
                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                               Gu Y, Nguyen C;
                                                                                                                                                                                                                                                                                                               (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                              WPI; 2002-724954/79.
                                                                                                                                                    sapiens.
                                                                                                                                                                          EP1243660-A2.
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                                                                                     11-DEC-2002
                                                                                                                                                                                        25-SEP-2002,
                                                                                                                                                           Synthetic.
                                                                      ABV85535;
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                                       RESULT 265
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                                               ABV8553
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schultz1-899.rng

ABK25932 standard; DNA;

ABK25932

09-APR-2002

ABK25932;

Chromosomal

o-methyl modification; LNA modification; phosphorothioate linkage; DNA repair; DNA alteration; environmental tolerance; hygromycin-B; abiotic stress tolerance; improved nutritional value; hygromycin; primer;

amino acid over production, herbicide resistance; glyphosate resistance; imidazolinone herbicide resistance; sulphonylurea herbicide resistance; porphyric herbicide resistance; triazine resistance; disease resistance; andified fatarch production; waxy starch; altered floral morphology; male-sterile plant; albino mutant; modified fatty acid content; reduced palmitate production; albino plant; increased stearate production; reduced linolenic acid production;

photosynthetic process.

Arabidopsis thaliana

Synthetic

WO200192512-A2.

genomic alteration; genome altering oligonucleotide; PCR; ss;

Amino acid overproduction conferring genome altering oligonucleotide #4.

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Nucleic acid encoding human UDP-GalNAc:polypeptide N-cetylgalactosaminyltransferase 10 protein is useful to diagnose, prevent and treat disorders associated with reduced or over expression of the
                                                                               Human; UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 10;
pp-GaNTase 10; EC 2.4.1.41; chromosome 7q11.2; gene therapy; scanning;
                                                             Human pp-GaNTase 10 scanning 17-mer SEQ ID NO:529
                                                                                                                                                                                                                                                                                                                                                                                                                    Example 2; SEQ ID NO 529; 59pp; English.
        ABV85536 standard; DNA; 17 BP.
                                                                                                                                                                                                                                   2001WO-US000666.
2001WO-US000667.
2001WO-US000668.
                                                                                                                                                                                                                                                                         2001WO-US000670.
2001US-00864761.
                                                                                                                                                                                       2002EP-00001161
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2001WO-US000665
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                                                                                                                                                                                                                                                                                            2001US-0315984P
                                                                                                                                                                                                                                                                                                                                 Gu Y, Nguyen C;
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                                                                                                                                                                                                                                                                                                               (AEOM-) AEOMICA INC.
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                                                                                                                                                                                                                                                                                                                                                                                                encoded protein
                                                                                                                       sapiens.
                                                                                                                                                  EP1243660-A2.
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30-JAN-2001;
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                                                                                                                                                                                                                                                                           30-JAN-2001;
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                                                                                                                                                                                                                                                               30-JAN-2001;
                                                                                                                                                                                                                                                                                   23-MAY-2001;
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                                            11-DEC-2002
                                                                                                                                                                    25-SEP-2002
                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                  zhang J,
                                                                                                                       Homo
ABV85536
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human UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 10 (pp. GaNTase 10, EC 2.4.1.41) protein. Human pp-GaNTase 10 is located to GaNTase 10, EC 2.4.1.41) protein. Human pp-GaNTase 10 is located to present invention can be used in gene therapy. Molecules of the treat a disorder associated with decreased expression or activity of pp-GaNTase. The sequences given in ABV8501 to ABV86689 and ABP53502 to ABP53504 are given in the exemplification of the present invention. N.B. The sequence data for this patent is not represented in the printed specification but is based on sequence information supplied by the
The present invention describes an isolated nucleic acid (I) encoding a
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                                                     Gaps
                                                   0;
                      Score 11.2; DB 1; Length 17;
Pred. No. 7.9e+02;
0; Mismatches 3; Indels
Seguence 17 BP; 5 A; 5 C; 0 G; 7 T; 0 U; 0 Other;
                                                  0;
                         15.3%;
81.2%;
                                                     13; Conservative
                         Query Match
Best Local Similarity
                                                      Matches
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929 TATCCCTCCTCTTCAT 944

rarccarcararrear 16

Н

RESULT 267

Sequence 17 BP; 3 A; 2 C; 4 G; 8 T; 0 U; 0 Other;

The invention relates to an oligonuclectide for targeted alteration of a genetic sequence, which comprises a single-stranded oligonuclectide having a DNA domain. The DNA domain has at least one mismatch with respect to the genetic sequence to be altered and further comprises chemical modifications of the oligonuclectide. The chemical modifications of the oligonuclectide. The chemical modifications of the oligonuclectide are combination of more of these modifications. The oligonuclectides are useful for more of these modifications. The oligonuclectides are useful for chemical repair or alteration of plant genetic information. The oligonuclectides are particularly useful for creating plants with desired phenotypes, e.g. environmental or abiotic stress tolerance, improved nutritional value (e.g. altering amino acid content of plants or conferring amino acid over production), herbicide resistance (e.g. glyphosate resistance, imidazolinone and sulphonylurea herbicide (e.g. stress conferring amino acid content of plants resistance). disease resistance, modified oil production, modified starch production (e.g. increased starch or production of waxy starch), altered floral morphology (e.g. male-sterile plants) or modified fatty acid content (e.g. reduced palmitate, increased stearate or reduced linolenic acid). The oligonucleotides are also useful for producing albino mutants for the analysis of photosynthetic processes. This sequence represents a genome altering oligonucleotide of the invention New oligonucleotides with modified nuclease-resistant termini, useful for creating plants with desired phenotypes, e.g. stress tolerance, improved nutritional value, herbicide or disease resistance, or modified oil production. Kim J; Claim 7; Page 122; 220pp; English. Rice MC, 01-JUN-2001; 2001WO-US017672. 01-JUN-2000; 2000US-0208538P. 30-OCT-2000; 2000US-0244989P. 27-MAR-2001; 2001US-00818875. Gamper HB, (UYDE) UNIV DELAWARE WPI; 2002-106307/14. 06-DEC-2001. Kmiec EB, schultz1-899.rng

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ö
                                   Gaps
                                   ;
0
           15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02;
                                  Indels
                      Pred. No. 7.9e; Mismatches
                                  ;
                                                         922
                    81.2%;
                                                      907 ATTITCTTIGGICTIT
                                  Conservative
Query Match
Best Local Similarity
Trahes 13; Conserve
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16 1 AGTTTCTATGGGCTTT

SULT 268 3K25931,

ABK25931 standard; DNA; 17 BP

ABK25931;

(first entry) 09-APR-2002

Amino acid overproduction conferring genome altering oligonucleotide #3.

Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss; o-methyl modification; LNA modification, phosphorothicate linkage; DNA repair; DNA alteration; environmental tolerance; hygromycin-B; abiotic stress tolerance; improved nutritional value; hygromycin, primer; amino acid over production; herbicide resistance; glyphosate resistance; imidazolinone herbicide resistance; sulphonylurea herbicide resistance; prophyric herbicide resistance; triazine resistance; disease resistance; modified oil production; modified starrch production; waxy starch; altered floral morphology; male-sterile plant; albino mutant; modified fatty acid content; reduced palmitate production; albino plant; increased stearace production; reduced linolenic acid production; photosynthetic process.

Arabidopsis thaliana. Synthetic.

WO200192512-A2.

06-DEC-2001

01-JUN-2001; 2001WO-US017672

01-JUN-2000; 2000US-0208538P. 30-OCT-2000; 2000US-0244989P. 27-MAR-2001; 2001US-00818875.

(UYDE) UNIV DELAWARE.

2001WO-US000665. 2001WO-US000667. 2001WO-US000668.

2001WO-US000669 2001US-00864761

30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 23-MAY-2001;

30-JAN-2001; 30-JAN-2001;

09-OCT-2001; 2001US-0327898P

(AEOM-) AEOMICA INC

Zhan J;

2001WO-US000664

Rice MC, Gamper HB, Kmiec EB,

Kim J;

WPI; 2002-106307/14.

New oligonucleotides with modified nuclease-resistant termini, useful for creating plants with desired phenotypes, e.g. stress tolerance, improved nutritional value, herbicide or disease resistance, or modified oil production

Claim 7; Page 122; 220pp; English.

The invention relates to an oligomucleotide for targeted alteration of a genetic sequence, which comprises a single-stranded oligomucleotide having a DNA domain. The DNA domain has at least one mismatch with respect to the genetic sequence to bettered and further comprises chemical modifications of the oligomucleotide. The chemical modifications of the oligomucleotide. The chemical modifications of some phosphorothicate linkages on a terminus, or a combination of any two or more phosphorothicate linkages on a terminus, or a combination of any two or directing repair or alteration of plant genetic information. The oligomucleotides are particularly useful for creating plants with desired phenotypes, e.g. environmental or abiotic stress tolerance, improved nutritional value (e.g. altering amino acid content of plants or conferring amino acid over production), herbicide resistance (e.g. glyphosate resistance, indazolinone and sulphomylurea herbicide resistance),

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disease resistance, modified oil production, modified starch production (e.g. increased starch or production of waxy starch), altered floral morphology (e.g. male-sterile plants) or modified fatry acid content (e.g. reduced palmitate, increased stearate or reduced linolenic acid). The oligonuclectides are also useful for producing albino mutants for the analysis of photosynthetic processes. This sequence represents a genome altering oligonuclectide of the invention
                                                                                                                                                                                                                                                                                                                                                  Human, gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                 Gaps
                                                                                                                                                 ·,
                                                                                                                      15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02;
                                                                                                                                                3; Indels
                                                                                             Sequence 17 BP; 8 A; 4 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                           Human HTPL scanning oligonucleotide SEQ ID 4083.
                                                                                                                                              0; Mismatches
                                                                                                                                                                    907 ATTITCTTTGGTCTTT 922
                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-JAN-2002; 2002EP-00001167.
                                                                                                                                                                                             7
                                                                                                                                                                                                                                                    ABV82837 standard; DNA; 17
                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                           17 AGTTTCTATGGGCTTT
                                                                                                                               Local Similarity 81.3
es 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                    EP1229046-A2
                                                                                                                                                                                                                                                                                                     03-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-AUG-2002.
                                                                                                                                                                                                                                                                             ABV82837;
                                                                                                                      Query Match
                                                                                                                                                                                                                              RESULT 269
                                                                                                                                            Matches
                                                                                                                                                                                                                                          ABV8283
  8X8888888X8
                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                ð
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The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (i for long). HTPL shares an overall structure organisation with the Patched protein The shares arructural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10pl2.1. HTPL and its coding sequence are Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL. Example 2; Page 599; 718pp; English. WPI; 2002-676582/73.

ABV82836 standard; DNA; 17 BP 28-JAN-2002; 2002EP-00001167 WPI; 2002-676582/73 AEOMICA INC Local Similarity 30-JAN-2001; 23-MAY-2001; 09-OCT-2001; 30-JAN-2001; Homo sapiens EP1229046-A2 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 13; 07-AUG-2002 ABV82836; Query Match (AEOM-) Zhan J; Matches ABV82836 RESULT

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foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are chinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention
useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and
                                                                                                                                                                    HTPL. Su
foetal
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15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; Live 0; Mismatches 3; Indels Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other; 935 TCCTCTTCATIGGTTT 950 Conservative

6

Gaps

.; 0

rccrargcarragir 16

03-JAN-2003 (first entry)

Human HTPL scanning oligonucleotide SEQ ID 4082.

Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.

2001WO-US000663 2001WO-US000664

2001WO-US000665. 2001WO-US000667. 2001WO-US000668.

2001WO-US000669. 2001US-00864761. 2001US-0327898P.

Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.

Example 2; Page 599; 718pp; English.

protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL Mast two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is The present invention relates to human testis expressed Patched like

0 important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10912.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention. Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; Gaps ; 0 Human ERG G-cleaver ribozyme target sequence Seq ID No 1260. 15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; ive 0; Mismatches 3; Indels Sequence 17 BP; 2 A; 3 C; 2 G; 10 T; 0 U; 0 Other; ICCICITCALIGGITY 950 ВР 17 ABK18613 standard; RNA; 17 (first entry) TCCTATGCATTTGTTT 13; Conservative Similarity 39-APR-2002 935 ABK18613; Query Match Best Local 8 RESULT 271 ABK18613/c Matches 8×666666666668×8 à g

angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme; Jarvis T, Von Carlowitz I, Mcswiggen JA, Mclaughlin F, Randi AM; 16-MAY-2001; 2001WO-US015866. 16-MAY-2000; 2000US-00572021 (RIBO-) RIBOZYME PHARM INC. (GLAX) GLAXO GROUP LTD. WPI; 2002-082995/11. WO200188124-A2. Homo sapiens 22-NOV-2001. amberzyme.

Novel polynucleotide which down regulates expression of Ets-related gen useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome. Claim 4; Page 83; 149pp; English.

The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruc vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu

syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a cell, by contacting (I) with RNA, in the presence of a divalent cation such as Mg2+. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically targeting genes that share homology with ERG gene or ERG fusion genes. ARKL7354-ABK2319 represent moleic acids, including antisense and and and a constant of the contaction of the contaction of the cation share homology with ERG gene or ERG fusion genes. nucleic acid molecules which regulate expression of ERG, and related PCR primers of the invention enzymatic

Sequence 17 BP; 10 A; 1 C; 5 G; 0 T; 1 U; 0 Other;

Gaps ., ch 15.3%; Score 11.2; DB 1; Length 17; l Similarity 81.2%; Pred. No. 7.9e+02; 13; Conservative 0; Mismatches 3; Indels Best Local Similarity Query Match Matches

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SULT 272 3K19015/c

BP. ABK19015 standard; RNA; 17

ABK19015;

(first entry) 09-APR-2002

Human ERG DNAzyme target sequence Seq ID No 1662.

Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; veruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme amberzyme.

Homo sapiens.

WO200188124-A2

22-NOV-2001.

16-MAY-2001; 2001WO-US015866.

16-MAY-2000; 2000US-00572021

(RIBO-) RIBOZYME PHARM INC.

(GLAX) GLAXO GROUP LID.

Novel polynucleotide which down regulates expression of Ets-related gene, useful for treating cancer. diahatic rationally WPI; 2002-082995/11

Jarvis T, Von Carlowitz I, Mcswiggen JA, Mclaughlin F,

useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

Claim 4; Page 106; 149pp; English

The invention relates to a nucleic acid molecule (I) which down regulates expression of an Es-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabbeir retinopathy, macular degeneration, architicis, psoriasis, verruca tumour angiogenesis, diabbeir retinopathy, macular degeneration, conditions angiofibroma of tuberous sclerosis, port-wine stains, Sturge vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge Weber syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a cell, by contacting the cell with (I). (I) is useful for cleaving RNA of ERG genes, by contacting (I) with RNA, in the presence of a divalent cation such as Mg2+. (I) is useful for diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically the presence of ERG RNA in a cell. (I) is useful for specifically cargeting genes that share homology with ERG gene or ERG funion genes.

ARRITASHA-ARRIZATIO represent nameled in the presence of a divalent cargeting genes that share homology with ERG gene or ERG funion genes. nucleic acid molecules which regulate expression of ERG, and related PCR primers of the invention

Sequence 17 BP; 11 A; 1 C; 4 G; 0 T; 1 U; 0 Other;

Gaps . Length 17; 3; Indels Score 11.2; DB 1; Pred. No. 7.9e+02; 0; Mismatches 3; 15.3%; Query Match Best Local Similarity 81.2³ Matches 13; Conservative

0;

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à

RESULT 273 ABK18354/c

BP ABK18354 standard; RNA; 17

ABK18354;

(first entry) 09-APR-2002

Human ERG hammerhead ribozyme target sequence, Seq ID No 1001.

Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenawy Weber syndrome; Rippel-Trenawy Weber syndrome; inozyme; inozyme; inozyme; inozyme; inozyme; amberzyme.

Homo sapiens.

WO200188124-A2.

22-NOV-2001.

16-MAY-2001; 2001WO-US015866.

Randi AM;

16-MAY-2000; 2000US-00572021.

(RIBO-) RIBOZYME PHARM INC.

(GLAX) GLAXO GROUP LTD.

Randi AM; Mclaughlin F, Mcswiggen JA, Von Carlowitz I, Jarvis T,

WPI; 2002-082995/11.

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The invention relates to a nucleic acid molecule (1) which down regulaces expression of an EES-related gene (ERG). (1) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinogathy, macular degeneration, neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge syndrome, leukaemia, osteoporosis and wound healing. (1) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (1) under conditions suitable for the treatment. Leukaemia or tumour the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour chemotherapy treatment. (1) is useful for reducing ERG activity in a coll, by contacting (1) with RNA, in the presence of a divalent cation such as Mg2+. (1) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnosic tool to examine genetic drift and mutations with RNG and as diagnosic tool to examine genetic drift and mutations with ERG gene or ERG fusion genes.
                      Novel polynucleotide which down regulates expression of Ets-related gene, useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
                                                                                                                                                                                                            The invention relates to a nucleic acid molecule (I) which down regulates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABK17354-ABK22719 represent nucleic acids, including antisense and enzymatic nucleic acid molecules which regulate expression of ERG, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      related PCR primers of the invention
                                                                                                                                               Claim 4; Page 77; 149pp; English.
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. 0 15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.98+02; tive 0; Mismatches 3; Indels Sequence 17 BP; 12 A; 2 C; 2 G; 0 T; 1 U; 0 Other; 908 TTTTCTTTGGTCTTTG 923 rrrrcrcrrcrrrrrs 2 Query Match Best Local Similarity 81.2 Matches 13; Conservative 17 3 Q

Human PAPP-Ea associated 17-mer SEQ ID 622. ABS75096 standard; DNA; 17 BP (first entry) 24-DEC-2002 ABS75096; RESULT 274

PAPP-E; human; pregnancy associated plasma protein E; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.

Homo sapiens

US2002102252-A1 01-AUG-2002 06-APR-2001; 2001US-00827998 26-MAY-2000; 2000US-0207456P

(GUYY/) GU Y. (SHAN/) SHANNON M E.

Shannon ME; Gu Y,

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                                                                                                                                                           This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hpapp-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                               New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 6 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                      English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         922 TGCCTTTTATCCCTCC 937
                                                                                                                   Example 2; Page 157; 353pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  || ||| ||| ||| ||||| TGGCTTCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13; Conservative
WPI; 2002-697817/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
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ABS75095 standard; DNA; 17 BP (first entry) 24-DEC-2002 ABS75095;

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Gaps

275

Human PAPP-Ea associated 17-mer SEQ ID 621.

PAPP-E; human; pregnancy associated plasma protein B; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.

US2002102252-A1. Homo sapiens

06-APR-2001; 2001US-00827998. 26-MAY-2000; 2000US-0207456P. 01-AUG-2002.

WPI; 2002-697817/75. (GUYY/) GU Y. (SHAN/) SHANNON M E. Gu Y, Shannon ME;

New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy

3xample 2; Page 156; 353pp; English.

This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein B, hPAPPE. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be

used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antental diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform MRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention

Sequence 17 BP; 6 A; 3 C; 7 G; 1 T; 0 U; 0 Other;

Gaps ; 0 15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; Live 0; Mismatches 3; Indels 13; Conservative Best Local Similarity Query Match Matches

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SULT 276

ABK56283 standard; RNA; 17 BP K56283/c

ABK56283;

(first entry) 02-JUL-2002 Human CLCA1 gene enzymatic nucleic acid #654.

Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndromic oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic; acetylcysteine

Homo sapiens.

WO200211674-A2

14-FEB-2002

09-AUG-2001; 2001WO-US024970,

09-AUG-2000; 2000US-0224383P.

(RIBO-) RIBOZYME PHARM INC. (SYNT) SYNTEX USA LLC. (THOM/) THOMPSON J.

Szymkowski DE; Ayers D, Mckenzie T, Thompson J, Maswiggen J, Grupe A;

WPI; 2002-217145/27.

Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.

Claim 4; Page 66; 152pp; English.

The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids,

The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated I (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowell syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition to associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corricosteroids, cartibacterials, vaccinations, acetylcysteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect

Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.

Claim 4; Page 70; 152pp; English.

Szymkowski DE;

Thompson J, Mcswiggen J, Mckenzie T, Ayers D,

WPI; 2002-217145/27.

Grupe A;

09-AUG-2001; 2001WO-US024970. 09-AUG-2000; 2000US-0224383P.

WO200211674-A2.

14-FEB-2002.

Homo sapiens.

(RIBO-) RIBOZYME PHARM INC. (SYNT) SYNTEX USA LLC.

(SYNT) SYNTEX USA] (THOM/) THOMPSON J.

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                                                                                                                                                                                                                                                                                   Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
antibacterials, vaccinations, acetylcysteine and mucokinetic agents. Thuslaic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of CLCA1 RNA in a cell. This sequence represents an
                                                                                                         Gaps
                                                                                                        0;
                                                                                  Length 17;
                                                                                                       3; Indels
                                                             Sequence 17 BP; 9 A; 3 C; 2 G; 0 T; 3 U; 0 Other;
                                          enzymatic nucleic acid molecule of the invention
                                                                                  Score 11.2; DB 1;
Pred. No. 7.9e+02;
                                                                                                                                                                                                                                                                Human CLCA1 gene enzymatic nucleic acid #789.
                                                                                                       0; Mismatches
                                                                                                                            939 CTICATIGGITTAATG 954
                                                                                                                                                                                                    BP.
                                                                                  15.3%;
81.2%;
                                                                                                                                               16 crirarirgirgaarg
                                                                                                                                                                                                    ABK56418 standard; RNA; 17
                                                                                                                                                                                                                                           (first entry)
                                                                                                       13; Conservative
                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                               acetylcysteine
                                                                                                                                                                                                                                           02-JUL-2002
                                                                                                                                                                                                                       ABK56418;
                                                                                                       Matches
                                                                                                                                                                             RESULT 27
ABK56418
                                                                                                                                                                                                           88888888
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Gaps

0

Indels

15.3%; Score 11.2; DB 1; Length 17; 50.0%; Pred. No. 7.9e+02;

5; Mismatches

8; Conservative

Local Similarity

schultz1-899.rng

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Sequence 17 BP; 2 A; 8 C; 1 G; 0 T; 6 U; 0 Other;
                               Query Match
                                                            Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (CDD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition casociated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of CLCA1 RNA in a cell. This sequence represents an
                                                                                                        ·.
                                                                                                                                                                                                                                                                                                                                                          Human, chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.
                                                                                                         Gaps
   This sequence represents an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Szymkowski DE;
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0
                                                                          15.3%; Score 11.2; DB 1; Length 17; 50.0%; Pred. No. 7.9e+02;
                                                                                                        3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Thompson J, Mcswiggen J, Mckenzie T, Ayers D,
                                             Sequence 17 BP; 4 A; 7 C; 0 G; 0 T; 6 U; 0 Other;
the presence of CLCA1 RNA in a cell. This sequencenzymatic nucleic acid molecule of the invention
                                                                                                                                                                                                                                                                                                                              Human CLCAl gene enzymatic nucleic acid #220.
                                                                                                      5; Mismatches
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                                                                                                                                     930 ATCCCTCCTCTTCATT 945
                                                                                                                                                                                                                                          ABK55849 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-AUG-2000; 2000US-0224383P.
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AUCCCACCUUCUCAUU 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RIBOZYME PHARM INC. SYNTEX USA LLC.
                                                                                                                                                                                                                                                                                                    02-JUL-2002 (first entry)
                                                                                                        8; Conservative
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                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    THOMPSON J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200211674-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                          acetylcysteine
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
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                                                                                                                                                                                                                                                                      ABK55849;
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                                                                                                                                                                                                             RESULT 278
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 with tumour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
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                                                                                                                                                                                                                                                                                                                                                                                        ss; tumour suppressor; antitumour; cytostatic; tumour suppression; tumour regression; apoptosis; virus resistance; diagnosis; cellular degeneration.
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                                                                                                                                                                                                                                                                                                                                            Human tumour suppressor sequence #1574.
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931 TCCCTCCTCTTCATTG 946
                                                                                                                                                                                     ACC52807 standard; DNA; 17 BP
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                              1 UCCCACCUUCUCAUUG 16
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                                                                                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
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ID ACC5;
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AC ACC5
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DT 27-J
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New nucleic acid sequences associated with tumor suppression, regression, apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
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                                                                                                                                                                                                                                      This sequence represents an isolated nucleic acid sequence associated with tumour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
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                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 1 A; 2 C; 4 G; 10 T; 0 U; 0 Other;
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                       Amson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              903 GGTCATTTTCTTTGGT 918
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Best Local Similarity 81.2%;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GATCTTTGTCTTTGGT 16
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                  Telerman A,
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                                                              WPI; 2003-250498/25.
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                  Tuijnder M,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This sequence represents an isolated nucleic acid sequence associated with tumour suppression or regression, apoptosis or virus resistance.
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                                                          ss; tumour suppressor; antitumour; cytostatic; tumour suppression; tumour regression; apoptosis; virus resistance; diagnosis; cellular degeneration.
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                  Human tumour suppressor sequence #1294
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                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman A,
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                                                                                                                                                    Homo sapiens,
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ACC54448;

SULT 281 C54448

Query Match Matches The

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Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                          Gaps
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                                                                                                                                                                                                 Tumour suppression related human fukutin oligo SEQ ID No 2628.
                   15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; live 0; Mismatches 3; Indels
Sequence 17 BP; 4 A; 5 C; 1 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                    Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                               (MOLE-) MOLECULAR ENGINES LAB
                                                              930 ATCCCTCCTCTTCATT 945
                                                                                                                                     ABT36991 standard; DNA; 17 BP
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                                                                                                                                                                              (first entry)
                                        Matches 13; Conservative
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                               Best Local Similarity
                                                                                                                                                                                                                                                                                             WO2003025175-A2.
                                                                                                                                                                              12-JUN-2003
                                                                                                                                                                                                                                                                                                                  27-MAR-2003
                                                                                                                                                         ABT36991;
                     Query Match
                                                                                                                RESULT 28:
ABT36991/
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The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in es. The polypeptides can also be used to generate antibodies, and ne polypeptide and antibodies are useful as components of protein The nucleic acid sequences of the invention can be used in gene This polynucleotide sequence represents a tumour suppression numan fukutin oligonucleotide of the invention patient samples is useful for diagnosis and/or prognosis of diseases. The polypeptides can also be used to generate anti therapy. This related human both the chips.

Disclosure; Page 340; 720pp; French.

both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynuclectide sequence represents a tumour suppression related human fukutin oligonuclectide of the invention

15.3%; Score 11.2; DB 1; Length 17;

Query Match

Sequence 17 BP; 1 A; 3 C; 4 G; 9 T; 0 U; 0 Other;

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Sequence 17 BP; 6 A; 2 C; 6 G; 3 T; 0 U; 0 Other;
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The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence that alignment, at least 80 % identity to the 17 mer sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RMA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, celts containing the recombinant polypeptides the properties are useful for gregaration of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alahomer's disease and can schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or proposisis of these ö Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; achizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds. New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and Gaps diseases. The polypeptides can also be used to generate antibodies, both the polypeptide and antibodies are useful as components of prot . 0 Tumour suppression related human fukutin oligo SEQ ID No 4088. Length 17; 3; Indels 15.3%; Score 11.2; DB 1; 81.2%; Pred. No. 7.9e+02; tive 0; Mismatches 3; Disclosure; Page 511; 720pp; French. Tuljnder M; 948 ABT38451 standard; DNA; 17 BP (MOLE-) MOLECULAR ENGINES LAB 17-SEP-2002; 2002WO-IB004208. 17-SEP-2001; 2001FR-00011978. 17 CATCCTCTGCATTGAT 2 12-JUN-2003 (first entry) Query Match
Best Local Similarity 81.29 933 CCTCCTCTTCATTGGT and transfected cells. relerman A, Amson R, WPI; 2003-313353/30. WO2003025175-A2. Homo sapiens. 27-MAR-2003. ABT38451; ABT38451 RESULT 셤 ò

930 ATCCCTCCTCTTCATT 945

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                  81.2%; Pred.
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                                                                                                                 1 GATCTGTGCCTTTTGT 16
                                                                                                                                                                                                                                                                                               (first entry)
                                                                          916 GGTCTTTGCCTTTTAT
                                     13; Conservative
                  Best Local Similarity
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The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell diseases that are characterised by development of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polymucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
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                            Score 11.2; DB 1; Length 17; Pred. No. 7.9e+02; 0; Mismatches 3; Indels
Sequence 17 BP; 3 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
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930 ATCCCTCCTCTTCATT 945

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Gaps

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15.3%; Score 11.2; DB 1; Length 17; larity 81.2%; Pred. No. 7.9e+02; Conservative 0; Mismatches 3; Indels

Query Match Best Local Similarity Matches 13; Conserv

Sequence 17 BP; 4 A; 7 C; 2 G; 4 T; 0 U; 0 Other;

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The invention tradec's to a novel isolate 1/1 met nuclei datus sequence, a sequence with, after optimal sequence, a sequence with after optimal calignment, at least 80 % identity to the 17 mer sequence, a sequence that nucleotides from the 17 mer sequence, a sequence, a sequence that the involvence of a sequence that sequence, a sequence that nybridizes to them under highly stringent conditions, or the complement of a firmention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a mucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for component of a gene chip, in vitro as (anti) sense reagents, and for component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for the preparation, specifically cancer but also Alzheimer's disease and components of the Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene there are however the polypeptide sequences of the invention can be used in gene there are however.
                                                                                                                                                                                                                                                                             Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
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                                                                                                        ABT34837 standard; DNA; 17
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Tuijnder M;

Telerman A, Amson R, WPI; 2003-313353/30. ABT35884 standard; DNA; 17 BP.

RESULT 288

ABT35884

ABT35884;

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ATCACGCCTCTGCATT 17

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given in the specification, a sequence containing at least 15 consecutive, nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic caids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmacetuicals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in article for the second of the sexpression of the 17 mer nucleic acids in articles.
                                                                                                                                                                                             Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
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                     ABT36373 standard; DNA; 17
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A3T36373,
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The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence that calignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them. Or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or call schemeration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these chizophrenia and also be used to generate antibodies, and
                                                                                                                                            Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
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15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; Live 0; Mismatches 3; Indels

943 ATTGGTTTAATGTATC 958

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Local Similarity 81.2 nes 13; Conservative

Query Match Matches 16 ATTGGCTTAATAGATC 1

schultz1-899.rng

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

Tumour suppression related human fukutin oligo SEQ ID No 115.

(first entry)

12-JUN-2003

ABT34478;

BP.

ABT34478 standard; DNA; 17

SULT 289

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The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment at least 80 % identity to the 17 mer sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for disponsis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. This nucleic acid sequence represents a tumour suppression therapy. This polynucleotide sequence represents a tumour suppression
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                                            ABT37596 standard; DNA; 17 BP.
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New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Tuijnder M;

Telerman A, Amson R, WPI; 2003-313353/30.

(MOLE-) MOLECULAR ENGINES LAB.

17-SEP-2002; 2002WO-IB004208. 17-SEP-2001; 2001FR-00011978.

WO2003025175-A2. Homo sapiens.

27-MAR-2003.

Disclosure; Page 47; 720pp; French.

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The invention tracts to a novel isolate it is muchen at least 15 consecutive in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence, a sequence, a sequence that consider the invention is activated to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic caids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, cply evector containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for tyeparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell case and the polypeptides can also be used to generate antibodies, and diseases. The polypeptides can also be used to generate antibodies, and chips. The nucleic acid sequence represents a tumour suppression characy. The nucleic acid sequence represents a tumour suppression characterial characterial explanation of the invention can be used in gene characy. This polymucleotide sequence represents a tumour suppression characterial calls sequence represents a tumour suppression calls related human fukutin oligonucleotide of the invention
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Score 11.2; DB 1; Length 17; Pred. No. 7.9e+02; 0; Mismatches 3; Indels

904 GTCATTTTTTGGTC 919

16 GTCATCTTTTTGATC 1

3SULT 290 3T34478/C

Ouery Match Best Local Similarity 81.2%; Matches 13; Conservative

therapy. This polynuciective sequence invention related human fukutin oligonucleotide of the invention Sequence 17 BP; 10 A; 2 C; 3 G; 2 T; 0 U; 0 Other; Cytostatic, virucide; neuroprotective, nootropic, neuroleptic, gene chip, antisense, sense, tumour, cell degeneration, cancer, Alzheimer's disease, schizophrenia, protein chip, gene therapy, tumour suppression,

numan fukutin; ds Homo sapiens

27-MAR-2003.

Tumour suppression related human fukutin oligo SEQ ID No 5843.

13-JUN-2003 (first entry)

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Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
                          Tumour suppression related human fukutin oligo SEQ ID No 3935.
                                                                                                                                                     (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                        17-SEP-2002; 2002WO-IB004208.
                                                                                                                                      17-SEP-2001; 2001FR-00011978.
             (first entry)
                                                                                                                                                                   relerman A, Amson R,
                                                                                                                                                                                WPI; 2003-313353/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                           WO2003025175-A2.
                                                                                                                                                                                                                                                                                                                                                                                                related human
                                                                              Homo sapiens
             12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                           13;
                                                                                                         27-MAR-2003
ABT38298;
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The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence that alignment at least 80 % identity to the 17 mer sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic cards of the invention are useful as probes and primers for detecting, identifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, cproduction of recombinant polypeptides. Any of the nucleic acids, cproparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell cheeved to an also partient and any interval of the expression of the 17 mer nucleic acids in parient samples is useful for diagnosis and/or prognosis of these content and and and and any properties and any partied are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polymucleotide sequence represents a tumour suppression content and any and any parties.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 1 A; 2 C; 3 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 717; 720pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MOLE-) MOLECULAR ENGINES LAB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-SEP-2001; 2001FR-00011978.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The mudleic acid sequences of the invention can be used in gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a novel isolated 17 mer nucleic acid sequence,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This polynucleotide sequence represents a tumour suppression numan fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tuijnder M;
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Gaps

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(first entry)

13-JUN-2003

ABT40206;

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RESULT 292 ABT40206

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Tumour suppression related human fukutin oligo SEQ ID No 5557.
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cyrostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

Homo sapiens.

WO2003025175-A2.

27-MAR-2003

17-SEP-2002; 2002WO-IB004208

17-SEP-2001; 2001FR-00011978

(MOLE-) MOLECULAR ENGINES LAB

Tuijnder M; Telerman A, Amson R,

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 683; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated mucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of agene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheiner's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention

Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;

Gaps ; 15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; ive 0; Mismatches 3; Indels Query Match 15.3 Best Local Similarity 81.2 Matches 13; Conservative

ADA99961 standard; DNA; 17 A99961/c SULT 294

BP.

(first entry) 20-NOV-2003

ADA99961;

Human MDZ3 scanning oligonucleotide SEQ ID 950.

Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.

Homo sapiens.

EP1281758-A2

05-FEB-2003.

30-JUL-2002; 2002EP-00016874.

02-AUG-2001; 2001US-00922181

(AEOM-) AEOMICA INC

Nguyen C; Gu Y, Shannon M,

WPI; 2003-423107/40.

New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7 or MDZ12, e.g. cancer.

Example 8; SEQ ID NO 950; 103pp; English.

associated with decreased or increased expression or activity of NDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnoshing or monitoring a disease caused by altered expression of MDZ3, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ7, or MDZ12 genetic locus. The probes are The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7922.1, MDZ4 is encoded at chromosome 6921.3-22.2, MDZ7 is encoded at chromosome 16911.3 encoded at chromosome 1522.1, MDZ7 is encoded at chromosome 15226.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy. Or in manufacturing a medicament for treating or preventing a disorder useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.

Sequence 17 BP; 9 A; 2 C; 6 G; 0 T; 0 U; 0 Other;

Gaps ., 15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; 3; Indels 0; Mismatches 13; Conservative Local Similarity Query Match Matches

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931 TCCCTCCTCTTCATTG 946

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ADA99958 standard; DNA; 17

ADA99958;

BP

20-NOV-2003 (first entry)

Human MDZ3 scanning oligonucleotide SEQ ID 947.

Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ1; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.

Homo sapiens.

EP1281758-A2.

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RESULT 297
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ4; MDZ4; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
                                                                                                                                                                                                                                                                                                                                                                                            useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                                         New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7 or MDZ12, e.g. cancer.
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                                  30-JUL-2002; 2002EP-00016874.
                                                           02-AUG-2001; 2001US-00922181
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                                                                                                          Gu Y, Nguyen C;
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les 13; Conservative
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           05-FEB-2003
                                                                                                          Shannon M,
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zinc finger protein; MD21; MD21; MD212; chromosome 7q22.1;
chromosome 6p21.3.22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
developmental disorder; ss.
                                                                                                                                                      New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
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                                                                                                                                                                                                                                                                                                                                                                        Example 8; SEQ ID NO 949; 103pp; English.
                                                                                                                                                                                                                                                                                       MDZ4, MDZ7 or MDZ12, e.g. cancer.
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Gu Y, Nguyen C;
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                                                                             WPI; 2003-423107/40.
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    Shannon M,
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The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ12, MDZ12. MDZ12. MDZ12 is encoded at chromosome 6722.1, MDZ4 is encoded at chromosome 6721.3.2, MDZ7 is encoded at chromosome 16911.2 and MDZ12 is encoded at chromosome 16911.2 and MDZ12 is encoded at chromosome 15926.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                             Example 8; SEQ ID NO 1238; 103pp; English.
MDZ4, MDZ7 or MDZ12, e.g. cancer.
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Sequence 17 BP; 8 A; 4 C; 4 G; 1 T; 0 U; 0 Other;

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Gaps
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Query Match 15.3%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 7.9e+02; Matches 13; Conservative 0; Mismatches 3; Indels
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SULT 298 B02204/c

ADB02204 standard; DNA; 17 BP.

ADB02204;

(first entry) 20~NOV-2003

Human MDZ4 scanning oligonucleotide SEQ ID 3190.

Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ1; Chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.

Homo sapiens.

EP1281758-A2.

05-FEB-2003

30-JUL-2002; 2002EP-00016874

02-AUG-2001; 2001US-00922181.

(AEOM-) AEOMICA INC.

Gu Y, Nguyen C; Shannon M,

WPI; 2003-423107/40.

New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7 or MDZ12, e.g. cancer.

Example 8; SEQ ID NO 3190; 103pp; English.

The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MD23, MD24, MD21, MD212. MD23 encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2, MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome

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or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12. e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ10. or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, or MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 792.1, MDZ4 is encoded at chromosome Ep13-2.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15p11.2 and MDZ12 is encoded at chromosome 15p12.3 and MDZ12 is encoded at chromosome 15p2.3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ1, or MDZ12. The probes are
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zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                               vaccines. The present sequence was used to illustrate the invention.
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                                                                                                                                                                                                                                                                                                                  15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                        Sequence 17 BP; 8 A; 1 C; 8 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human MDZ3 scanning oligonucleotide SEQ ID 1237.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ4; MDZ4; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as
useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                                                      Gaps
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                                                                                                                        15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; artive 0; Mismatches 3; Indels
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                                                                                   Sequence 17 BP; 8 A; 4 C; 5 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human MDZ4 scanning oligonucleotide SEQ ID 3191.
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                                                                                                                                                                                                               934 CTCCTCTTCATTGGTT 949
                                                                                                                                                                                                                                                                                                                                                           ADB02205 standard; DNA; 17 BP
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                                                                                                                                                                      Conservative
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                                                                                                                          Query Match
Best Local Similarity
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome for chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                                                                                                                                                                                                        Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
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                                                                                                                                                                                                                                         Human MDZ3 scanning oligonucleotide SEQ ID 948
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                                                                                                                              ADA99959 standard; DNA; 17 BP
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929 TATCCCTCCTCTTCAT
                                    16 TGTTCCTCCTCTTCCT
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RESULT 302

15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02;

Query Match Best Local Similarity DNAzyme; inozyme; zinzyme;

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amberzyme, G-cleaver ribozyme, decoy molecule, aptamer,
HBV reverse transcriptase, Enhancer I region, viral replication,
degenerative, disease state, HBV infection, HCV infection, cirrhosis,
                                                                                                     liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
       enzymatic nucleic acid; hammerhead ribozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 240; 387pp; English.
                                                                                                                                                                                                                                                                                                                                                                                              08-JUN-2001; 2001US-00877478.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0337055P.
05-DEC-2001; 2001US-0337055P.
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                                                                                                                                                                                                                                                                                                                       26-MAR-2002; 2002WO-US009187
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|GGGCCUUGCCUAUUAU 17
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Roberts E;
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MORRISSEY D.
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MACEJAK D.
                                                                                                                                                                            Hepatitis C virus.
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                                                                                                                                                                                                                            WO200281494-A1.
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DRAPER
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(MACE/)
(MCSW/)
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(ROBE/)
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(LEEP/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
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                                                                                                                                                                                                                    Human; ribozyme; short interfering RNA; siRNA; HER2; K.Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.
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                                                                                                                                                                       Human K-Ras DNAzyme substrate #455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 58; Page 93; 185pp; English
%260343/c
) ABZ60343 standard; RNA; 17 BP.
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ACD57473 standard; RNA; 17 BP
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06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
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                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                       Homo sapiens.
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                                                                                                                      21-MAR-2003
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                                                                         ABZ60343;
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Best Local S
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The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or the synthesis, expression and/or stability of Hepatitis C virus (HCV) or and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, and enzymes, amberzymes, and enzymes. Also disclosed inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well cas oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds computed the expression and/or replication of HCV. The compounds disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV compounds of the DNAzyme sequences disclosed in the present
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                                                                                                                                                                                                                             Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
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Pavco P,
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Mcswiggen J, Morrissey D,
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Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                             Nucleic acid molecule, Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; inozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degemerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                      Pavco P,
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                                                              HCV DNAzyme substrate sequence #717.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 246; 387pp; English.
                                                                                                                                                                                                                                                        2001US-00877478.
2001US-0296876P.
2001US-0335059P.
2001US-0337055P.
       BP.
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                                                                                                                                                                                                                                                                                                   RIBOZYME PHARM INC.
BLATT L.
      ACD58187 standard; RNA; 17
                                             (first entry)
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Roberts E;
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MCSWIGGEN J.
MORRISSEY D.
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                                                                                                                                                                     Hepatitis C virus.
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08-JUN-2001;
24-OCT-2001;
05-DEC-2001;
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ACD58187/c
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The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, incorpues, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptemers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Bhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV DNAzyme or minus strand DNAzyme sequences disclosed in the present invention

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Sequence 17 BP; 4 A; 3 C; 3 G; 0 T; 7 U; 0 Other;
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                                                                                                                                                                                                                                                                               Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                             Gaps
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Length 17;
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Score 11.2; DB 1;
Pred. No. 7.9e+02;
0; Mismatches 3;
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                                                            965
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08-JUN-2001; 2001US-00877478.

08-JUN-2001; 2001US-0296876P.

24-OCT-2001; 2001US-0335059P.

05-DEC-2001; 2001US-0337055P.
 15.3%;
81.2%;
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                                                                                        16 TAAGGTATTGCAACCA 1
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                                                                                                                                                                                                                            (first entry)
                                                            950 TAATGTATCGCTACCA
 Query Match 15.3
Best Local Similarity 81.2
Matches 13; Conservative
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Roberts E;
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MACEJAK D.
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LEE P.
DRAPER K.
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Draper K,
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Claim 1; Page 271; 387pp; English.

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                        compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds that methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV DNAzyme or minus strand DNAzyme sequences disclosed in the present
genes and HBV viral replication. Also disclosed is a method for screening
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nucleic acid molecule, Hepatitis C virus, HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
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HBV reverse transcriptase; Enhancer I region; viral replication;
degenerative; disease state; HBV infection; HCV infection; cirrhosis;
liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
virucide; antiinflammatory; substrate; ss.
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                                                                                                                                                                                                                                                                                              Sequence 17 BP; 3 A; 6 C; 1 G; 0 T; 7 U; 0 Other;
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2001US-0335059P.
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24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
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(MACE/)
(MCSW/)
(MORR/)
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Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus

å Lee

Ъ, Pavco

Morrissey D,

Mcswiggen J,

Macejak D, Roberts E;

Blatt L, Draper K,

PAVCO P. LEE P. DRAPER K. ROBERTS E.

(PAVC/) (LEEP/) (DRAP/) (ROBE/) Roberts

WPI; 2003-229207/22.

infection.

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The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed transcriptase and/or HBV reverse transcriptase primer sequences, as well so cligonuclectides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV C genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and compounds compounds of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV increasing or minus strand DNAzyme sequences disclosed in the present
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead riboxyme; DNAzyme; inozyme; amberzyme; G-cleaver riboxyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer; region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                      ·,
                                                                                                                                                                                                                                                                                                                                                                                                15.3%; Score 11.2; DB 1; Length 17; 37.5%; Pred. No. 7.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
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m
                                                                                                                                                                                                                                                                                                                                                                                                                                  7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HBV inozyme substrate sequence #113.
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2001US-0337055P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACD51881 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAVCO P.
LEE P.
DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200281494-A1.
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05-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-OCT-2002.
                                                                                                                                                                                                                                                                                                                             invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACD51881;
                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (PAVC/)
(LEEP/)
(DRAP/)
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(BLAT/)
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                                                                                                                                                                                                                                                                                                                                                                                                                  Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 307
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% X C C C C C C C C C C C C C C C C X & X
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schultz1-899.rng

ь Б Lee

Pavco P,

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Blatt L, Macejak D,
Draper K, Roberts E;
           WPI; 2003-229207/22
                                                                                      Query Match
Best Local Similarity
                                                                                                                                                              Hepatitis C virus.
                                                                                                                                                                    WO200281494-A1.
                                                                                                                                                                         17-0CT-2002
                                                                                                                        ACD64075;
                                                                                         Best Loca
Matches
                                                                                                              RESULT 308
                                                                                                                ACD64075
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The present invention relates to nucleic acid molecules which modulate
the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
and enzymatic nucleic acids such as hammerhead ribozymes. DNAzymes,
inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
are nucleic acid decoy molecules and apramers that bind to HBV reverse
transcriptase and/or HBV reverse transcriptase primer sequences, as well
as oligonucleotides that specifically bind the Enhancer I region of HBV
DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
compounds and/or potential therapies directed against HBV, and compounds
that modulate the expression and/or replication of HCV. The compounds
c that modulate the expression and/or replication of HCV. The compounds
computed to HBV and HCV infection, replication and gene
stress states related to HBV and HCV infection, replication and gene
expression such as cirrhosis, liver failure, and hepatocellular
carcinoma. The present sequence represents a substrate for one of the HCV
DNAXME or minus strand DNAzyme sequences disclosed in the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic acid molecule, Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degemerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15.3%; Score 11.2; DB 1; Length 17; 43.8%; Pred. No. 7.9e+02; tive 6; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                  Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 2 A; 4 C; 5 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HCV DNAzyme substrate sequence #512.
                                                                                                                                                                                                                                                                                                                                                  Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 299; 387pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       933 CCTCCTCTTCATTGGT 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACD57814 standard; RNA; 17 BP.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
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                                                                          RIBOZYME PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 43.8 les 7; Conservative
                                                                                                                                                                                                                                                                                                                                               Macejak D,
Roberts E;
                                                                                                            BLATT L.
MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
PAVCO P.
                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-229207/22
                                                                                                                                                                                                                                                                                             ROBERTS E.
                                                                                                                                                                                                                                      LEE P.
DRAPER K.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         infection.
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                                                                                                                                                                                                                                                                                                                                               Blatt L,
                                                                                                                                                                                 (MORR/)
(PAVC/)
(LEEP/)
(DRAP/)
(ROBE/)
                                                                                                      (BLAT/)
(MACE/)
(MCSW/)
                                                                             RIBO-)
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                                                                                                                                                                                                                                                                                                                                       The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HEV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV energy and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             that modulate the expression and or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular excitance. The present sequence represents a substrate for one of the HBV ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences disclosed in the present invention
                                                                                                                                                                                    Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptuse; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
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                                                       Lee
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                                                       Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HCV minus strand DNAzyme substrate sequence #1378.
                                                    Mcswiggen J, Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 2 A; 5 C; 2 G; 0 T; 8 U; 0 Other;
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                                                                                                                                                                                                                                                                                                Example 1; Page 152; 387pp; English
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08-JUN-2001; 2001US-00877478.
08-JUN-2001; 2001US-0296876P.
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     (ROBE/) ROBERTS E.
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Gaps

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Hepatitis C virus

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08-JUN-2001; 2001US-00877478
08-JUN-2001; 2001US-0296876P.
08-JUN-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0335055P.
                                                                                          26-MAR-2001; 2001US-00817879.
                                                             26-MAR-2002; 2002WO-US009187
                                                                                                                                                                                    RIBOZYME PHARM INC.
                                                                                                                                                                                                                MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                          (DRAP/) DRAPER K. (ROBE/) ROBERTS E.
                                                                                                                                                                                                                                                             PAVCO P.
LEE P.
WO200281494-A1.
                                                                                                                                                                                                      BLATT
                              17-0CT-2002,
                                                                                                                                                                                 (RIBO-) (BLAT/) (MACE/) (MCSW/) (MORR/) (MORR/)
                                                                                                                                                                                                                                                             (PAVC/)
(LEEP/)
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á Lee Pavco P, Morrissey D, Mcswiggen J, Macejak D, Roberts E; Blatt L, Draper K,

WPI; 2003-229207/22

Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus infection.

Claim 1; Page 243; 387pp; English.

The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymes, include acids such as hammerhead ribozymes, DNAzymes, include antisense includes, zinzymes, amberzymes, and c-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV branchism.

Sequence 17 BP; 6 A; 5 C; 3 G; 0 T; 3 U; 0 Other;

Gaps ٥; 15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; tive 0; Mismatches 3; Indels Conservative Query Match Best Local Similarity Matches 13; Conserv

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949 TTAATGTATCGCTACC 964

17 TTAAGGTGTCGTTACC

ACD65196 standard; RNA; 17 ACD65196;

SULT 310 D65196/c BP.

(first entry) 30-SEP-2003

HCV minus strand DNAzyme substrate sequence #1939.

inozyme; zinzyme; Nucleic acid molecule, Hepatitis C virus, HCV, Hepatitis B virus, HBV, RNA stability, RNA expression, RNA synthesis, antisense, enzymatic nucleic acid, hammerhead ribozyme, DNAzyme, inozyme, zinzyme amberzyme, G-cleaver ribozyme, decoy molecule, aptamer, HBV reverse transcriptase, Enhancer I region, viral replication, degenerative, disease state, HBV infection, HCV infection, cirrhosis, liver failure, hepatocellular carcinoma, hepatotropic, cytostatic, virucide, antiinflammatory, substrate, ss.

Hepatitis C virus.

WO200281494-A1.

17-OCT-2002.

26-MAR-2002; 2002WO-US009187.

26-MAR-2001, 2001US-00817879. 08-JUN-2001, 2001US-00877478. 08-JUN-2001, 2001US-0296876P. 24-OCT-2001, 2001US-0337055P.

RIBOZYME PHARM INC. MCSWIGGEN J. MORRISSEY D. BLATT L. MACEJAK D. PAVCO P. BLATT (RIBO-) (BLAT/) (MCSW/) (MORR/) PAVC/)

LEE P. DRAPER K. ROBERTS E (ROBE/) (LEEP/) DRAP/)

Lee P; Pavco P, Mcswiggen J, Morrissey D, ο, Ε; Macejak D, Roberts E Blatt L, N Draper K,

WPI; 2003-229207/22.

Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus infection.

Claim 1; Page 309; 387pp; English.

The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptaners that bind to HBV reverse transcriptase primer sequences, as well transcriptase and/or HBV reverse transcriptase primer sequences, as well so oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocallular carcinoma. The present sequence represents a substrate for one of the HCV invention are useful by DNAzyme or minus strand DNAzyme sequences disclosed in the present invention

Sequence 17 BP; 7 A; 4 C; 4 G; 0 T; 2 U; 0 Other;

Gaps 0 15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; tive 0; Mismatches 3; Indels Local Similarity 81.2 les 13; Conservative Query Match Matches

0;

916 GGTCTTTGCCTTTTAT 931

à

0

17 GGGCCTTGCCTATTAT 2

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The present invention relates to nucleic acid molecules which modulate
the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
and enzymatic nucleic acids such as hammerhead ribozymes. Also disclosed
inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. DNAzymes,
c inozymes, zinzymes, and G-cleaver ribozymes. Also disclosed
are nucleic acid decoy molecules and aptamers that bind to HBV reverse
transcriptase and/or HBV reverse transcriptase primer sequences, as well
as oligonucleotides that specifically bind the Enhancer I region of HBV
DNA. The nucleic acids may be used to modulate the expression of HBV
compounds and/or potential therapies directed against HBV, and compounds
that modulate the expression and/or replication of HCV. The compounds and
the modulate the expression and/or replication of HCV. The compounds and
disease states related to HBV and HCV infection, replication and gene
expression such as cirrhosis, liver failure, and hepatocellular
carcinoma. The present sequence represents a substrate for one of the HBV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                     Nucleic acid molecule, Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antiennse; enzymatic nucleic acid, hammerhead ribozyme; DNAzyme; inozyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel compound useful for treating cirrhosis, liver failure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mcswiggen J, Morrissey D,
                                                                                                                                        HBV hammerhead ribozyme substrate sequence #87.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 137; 387pp; English.
                                ACD50468 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001US-00877478.
2001US-0296876P.
2001US-0335059P.
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                                                                                                     (first entry)
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Roberts E;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DRAPER K.
ROBERTS E.
                                                                                                                                                                                                                                                                                                                                  Hepatitis B virus.
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08-JUN-2001;
24-OCT-2001;
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                                                                    ACD50468;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (DRAP/)
(ROBE/)
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RESULT 311
                     ACD50468
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The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCW) or Hepatitis B virus (HBW) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as harmerhead ribozymes, DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degemerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
                                                                                                                                                                                                   Gaps
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                                                                                                                                     Length 17;
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                                                                                  Sequence 17 BP; 2 A; 6 C; 1 G; 0 T; 8 U; 0 Other;
                                                                                                                                        Score 11.2; DB 1;
Pred. No. 7.9e+02;
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                          disclosed in the present invention
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08-UUN-2001, 2001US-00877478.
08-UUN-2001, 2001US-0296876P.
24-OCT-2001, 2001US-0335059P.
05-DEC-2001, 2001US-0337055P.
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MCSWIGGEN J.
MORRISSEY D.
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Roberts E;
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                                                                                                                                          Query Match
Best Local Similarity
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DRAPER K.
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MACEJAK I
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Draper K,
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     ribozyme,
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(BLAT/)
(MACE/)
(MCSW/)
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(LEEP/)
(DRAP/)
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Pavco P,

Sequence 17 BP; 5 A; 4 C; 1 G; 7 T; 0 U; 0 Other;

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Transcriptase and/or HW reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatococlular carcinoma. The present sequence represents a substrate for one of the HCV DNAZYME or minus strand DNAZYME sequences disclosed in the present
are nucleic acid decoy molecules and aptamers that bind to HBV reverse
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Sequence 17 BP; 3 A; 3 C; 5 G; 0 T; 6 U; 0 Other;

.. 0 Gaps ; 0 15.3%; Score 11.2; DB 1; Length 17; 50.0%; Pred. No. 7.9e+02; Indels 5; Mismatches Conservative Query Match Best Local Similarity Local 8; Conserva

SULT 313

ACC64042 standard; DNA; 17

BP

ACC64042;

(first entry) 01-JUL-2003 Murine oligonucleotide associated with tumour supression, SEQ ID 1289.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ss.

Mus musculus

WO2003025176-A2.

27-MAR-2003

17-SEP-2002; 2002WO-IB004210.

17-SEP-2001; 2001FR-00011979.

(MOLE-) MOLECULAR ENGINES LAB

Tuijnder M;

Amson R,

Telerman A,

WPI; 2003-333167/31.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 181; 738pp; French.

The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying and variabilitying and variability multiplication of gene chip; in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia

Length 17;

DB 1;

15.3%; Score 11.2;

Query Match

Sequence 17 BP; 6 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                                                                                                      primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (Ab) against the polypeptide are useful for prevention and/or treatment of virtual infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzaheimer's disease or schizophremia). Analysis of the expression of the nucleotides can be used for diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                         Gaps
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15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02;
                                       Indels
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(first entry)
                                       13; Conservative
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               Local Similarity
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04-DEC-2003
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RESULT 316

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides or the nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours
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Analysis of the expression of the nucleotides can be used for diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                      Gaps
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also be used to screen for their specific interactive molecules
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                                                                                                                                                                                                                                                                                                                                      Tumour suppression/reversion associated nucleotide #2570.
                                      Indels
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Pred. No. 7.9e+02;
             81.2%; Pred. ....
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                                                                                                                                                                                                        ADB42247 standard; DNA; 17 BP.
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                                                                         933 CCTCCTCTTCATTGGT 948
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(first entry)
                                      13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-441574/41.
                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003040369-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Telerman A,
                                                                                                                                                                                                                                                                               18-DEC-2003
04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                     diagnosis.
                                                                                                                                                                                                                                            ADB42247;
                                                                                                                                                                   RESULT 315
                                      Matches
                                                                                                                                                                                        ADB42247
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The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antigan-binding fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHELP1 gene (ADC03514).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                              gene therapy; vaccine; sodium/hydrogen exchanger like protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                           Human Na/H exchanger-like protein 1 gene oligonucleotide #446.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                   NHELP1; passive replacement therapy; vaccine; diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 3 A; 3 C; 1 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 2; SEQ ID NO 486; 468pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADC04002 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            935 TCCTCTTCATTGGTTT 950
 BP.
                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001; 2001WO-US000666.
23-MAY-2001; 2001US-00864761.
21-DEC-2001; 2001US-0343331P.
                                                                                                                                                                                                                                                                                                                 25-JAN-2002; 2002EP-00001160.
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ADC03999 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rcrrcrrcaargrrrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-302724/30.
                                                                                                                                                                                                                                                                                                                                                                                                                           (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                          EP1273660-A2
                                                                         18-DEC-2003
                                                                                                                                                                                                                                                                            08-JAN-2003
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                                    ADC03999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gu Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADC04002
                                    셤
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ADC04002;

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Gaps

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15.3%; Score 11.2; DB 1; Length 17; ilarity 81.2%; Pred. No. 7.9e+02; Conservative 0; Mismatches 3; Indels

Query Match Best Local Similarity Matches 13; Conserv

18-DEC-2003

EP1273660-A2. Homo sapiens

08-JAN-2003.

Gu Y;

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The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antegonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHELP1 gene (ADC03514).
                                                                                                                                                                                                                                                                                                                                                                                         New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein; NHELP1; passive replacement therapy; vaccine; diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human Na/H exchanger-like protein 1 gene oligonucleotide #451.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; arive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 4 A; 2 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2; SEQ ID NO 613; 468pp; English.
                                                                                                                                            30-JAN-2001; 2001WO-US000666.
23-MAY-2001; 2001US-00864761.
21-DEC-2001; 2001US-0343331P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               938 TCTTCATTGGTTTAAT 953
                                                                                              25-JAN-2002; 2002EP-00001160.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001; 2001WO-US000666.
23-MAY-2001; 2001US-00864761.
21-DEC-2001; 2001US-0343331P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-DEC-2003 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13; Conservative
                                                                                                                                                                                                                                             (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                           WPI; 2003-302724/30
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EP1273660-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
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                                                08-JAN-2003
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                                                                                                                                                                                                                                                                                             Gu Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADC04004
8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antignen-binding fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHELP1 gene (ADC03514).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHELP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein; NHELP1; passive replacement therapy; vaccine; diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein; NHELP1; passive replacement therapy; vaccine; diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                  Human Na/H exchanger-like protein 1 gene oligonucleotide #449.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human Na/H exchanger-like protein 1 gene oligonucleotide #573.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 3 A; 3 C; 1 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 2; SEQ ID NO 489; 468pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADC04126 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       938 TCTTCATTGGTTTAAT 953
                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001; 2001WO-US000666.
23-MAY-2001; 2001US-00864761.
21-DEC-2001; 2001US-0343331P.
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                    (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-302724/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (AEOM-) AEOMICA INC
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Best Local Similarity
Matches 13; Conserv
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Homo sapiens.

18-DEC-2003 ADC04126;

SULT 318 C04126

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Gaps

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New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHELP1.
                                                                                                                                                                                                                                                                                                                                                                                                                       gene therapy; vaccine; sodium/hydrogen exchanger like protein;
                                                                                                                                                                                                                                                                                                                                                                                                     Human Na/H exchanger-like protein 1 gene oligonucleotide #707.
                                                                                                                                                                                                                                                                                                                                                                                                                                NHELP1; passive replacement therapy; vaccine; diagnosis.
                                                                                                                                                                                                                                                                                        939 CTTCATTGGTTTAATG 954
                                                                                                                                                                                                                                                                                                                                                   ADC04260 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001; 2001WO-US000666.
23-MAY-2001; 2001US-00864761.
21-DEC-2001; 2001US-0343331P.
                                                                                                                                                                                                                                                                                                       cricaargririacig 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (AEOM-) AEOMICA INC
(AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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                                                                                                                                                                                                                                                     Query Match
                                                                           NHELP1.
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               Gu Y:
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exchanger like protein (NRELPI). The NHELPI nucleic acid molecule, NHELPI polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELPI nucleic acid molecule, NHELDI polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELPI. The antibody or its a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELPI. The NHELPI nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHELPI gene (ADC03514).
                                                                                                   The invention relates to a nucleic acid molecule which encodes a Na+/H+
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seguence 17 BP; 3 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
                          Example 2; SEQ ID NO 747; 468pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 321
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ID ADC0
à
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELPI). The NHELPI nucleic acid molecule, NHELPI polypeptide, an antibody against the protein or its antigen-binding tragment is useful in therapy. The NHELPI nucleic acid molecule, NHELPI polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELPI. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELPI. The NHELPI nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to all-mer oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                   New human sodium-hydrogen exchanger like protein 1 (NHBLP1), useful as passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the human NHELP1 gene (ADC03514).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 3 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                    Example 2; SEQ ID NO 491; 468pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      spanning the sequence of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human
                                    Gaps
                                                                                                                                                                                                                                                                                                                    gene therapy; vaccine; sodium/hydrogen exchanger like protein;
                                    0
                                                                                                                                                                                                                                                                                  Human Na/H exchanger-like protein 1 gene oligonucleotide #572.
 15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02;
                                    3; Indels
                                                                                                                                                                                                                                                                                                                                  NHELP1; passive replacement therapy; vaccine; diagnosis.
                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; SEQ ID NO 612; 468pp; English
                                                                 901 CTGGTCATTTTCTTTG 916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2001; 2001WO-US000666.
23-MAY-2001; 2001US-00864761.
21-DEC-2001; 2001US-0343331P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-JAN-2002; 2002EP-00001160.
                                                                                                    CTGGCCATTTTCCATG 16
                                                                                                                                                                                   ADC04125 standard; DNA; 17
                                                                                                                                                                                                                                                     (first entry)
                                    13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-302724/30
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                     18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
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                                                                                                                                                                                                                    ADC04125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gu Y;
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antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELPI. The NHELPI nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHELPI gene (ADC03514).
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Sequence 17 BP; 5 A; 2 C; 4 G; 6 T; 0 U; 0 Other;

Gaps .; 0 15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; ive 0; Mismatches 3; Indels llarity 81.2%; Conservative Best Local Similarity Matches 13; Conserv Query Match

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SULT 322 C04259

ADC04259 standard; DNA; 17 ADC04259;

BP.

(first entry) 18-DEC-2003 Human Na/H exchanger-like protein 1 gene oligonucleotide #706.

ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein; NHELP1; passive replacement therapy; vaccine; diagnosis.

Homo sapiens

EP1273660-A2

08-JAN-2003

25-JAN-2002; 2002EP-00001160.

30-JAN-2001; 2001WO-US000666. 23-MAY-2001; 2001US-00864761. 21-DEC-2001; 2001US-0343331P.

(AEOM-) AEOMICA INC

Gu Y;

WPI; 2003-302724/30.

useful as preventing New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful passive replacement therapy or as a vaccine for treating or preventi disorders associated with aberrant expression or activity of human NHELP1

Example 2; SEQ ID NO 746; 468pp; English.

The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHELP1 gene (ADC03514).

DB 1; Length 17; 15.3%; Score 11.2;

Query Match

Sequence 17 BP; 2 A; 5 C; 4 G; 6 T; 0 U; 0 Other,

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·:
       Gaps
                                                                                                                            ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein; NHELP1; passive replacement therapy; vaccine; diagnosis.
       0;
                                                                                                                 Human Na/H exchanger-like protein 1 gene oligonucleotide #448.
       Indels
Pred. No. 7.9e+02;
); Mismatches 3;
                     916
                                                                      BP.
                                                                                                                                                                                                          30-JAN-2001; 2001WO-US000666.
23-MAY-2001; 2001US-00864761.
21-DEC-2001; 2001US-0343331P.
                                   crescentricare 17
                                                                                                                                                                                              25-JAN-2002; 2002EP-00001160
Best Local Similarity 81.2%;
Matches 13; Conservative
                                                                      ADC04001 standard; DNA; 17
                                                                                                  (first entry)
                     CTGGTCATTTTCTTTG
                                                                                                  18-DEC-2003
                                                                                                                                                    Homo sapiens
                                                                                                                                                                 EP1273660-A2
                                                                                                                                                                               08-JAN-2003.
                     106
                                                                                     ADC04001;
                                                        RESULT 323
                                                                ADC0400
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                                   g
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WPI; 2003-302724/30.

(AEOM-) AEOMICA INC.

New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHELP1.

Example 2; SEQ ID NO 488; 468pp; English.

The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELPI). The NHELPI nucleic acid molecule, NHELPI polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELPI nucleic acid molecule, NHELPI polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELPI. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELPI. The NHELPI nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHELPI gene (ADC03514).

Sequence 17 BP; 3 A; 4 C; 1 G; 9 T; 0 U; 0 Other;

Gaps .. O Length 17; 3; Indels 15.3%; Score 11.2; DB 1; 81.2%; Pred. No. 7.9e+02; Mismatches 0; Query Match
Best Local Similarity 81.4.
Best Local 3; Conservative

ò

936 CCTCTTCATTGGTTTA 951 CTTCTTCAATGTTTTA 16

g

RESULT 324 ADB45052/c

ВР

ADB45052 standard; DNA; 17

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cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, as sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                prognosis of these diseases. The nucleotides and polypeptides can sused to screen for their specific interactive molecules, cally useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic acid encoding human prostate membrane-specific antigen, ful e.g. for treatment of tumors and viral infection, also related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of viral infections or diseases characterized by development of
                                                                                                                 Tumour suppression/reversion associated nucleotide #5375.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 8 A; 3 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 660; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA06763 standard; DNA; 12 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                         (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               943 ATTGGTTTAATGTATC 958
                                                                                                                                                                                                                                                                                                                                                               17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                                                                                                                                                                                                                                     17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          useful e.g. for treatment or polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTTATTAATGGATC
                                                                         (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-441574/41.
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                                                                                                                                                                                                                                                                                    WO2003040369-A2
                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    potentially
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                                                                         18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Telerman A,
                                                                                                                                                                                                                                                                                                                          15-MAY-2003
                                                                                                                                                                                                              diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16
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                                     ADB45052
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corresponding to a part of a vascular endothelial growth factor (VEGF) comprising 1 of 6 sequences given in AAA06692 to AAA06697. AAA06698 to AAA06783 represent VEGF antisense oligonucleotides used in the exemplification of the present invention. The antisense oligonucleotides can contain phosphorothicate linkages. Oligonucleotides from the present invention have cytostatic and angiogenic activities, and can be used in gene therapy. The oligonucleotides are useful for inhibiting the expression of VEGF, e.g. for the treatment of diseases associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel oligonucleotides corresponding to a part of a vascular endothelial growth factor, useful for treating e.g. tumor cell growth and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                abnormal vascular permeability, cell proliferation, cell permeation, anglogenesis, neovascularisation, tumour cell growth and/or metastasis. AAA06784 represents a human VEGF nucleotide sequence from which the oligonucleotides are derived
                                                                  Human; vascular endothelial growth factor; VEGF; phosphorothioate; antisense oligonucleotide; inhibition; cytostatic; angiogenic; gene therapy; abnormal vascular permeability; cell proliferation; cell permeation; angiogenesis; neovascularisation; tumour cell growth;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes oligonucleotides (I) of 10-15 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oligonucleotide primer SEQ ID NO 291807 for detecting SNP TSC0014939.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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0
                                    /EGF derived short antisense oligonucleotide SEQ ID NO:72.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 11; DB 1; Length 12;
Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Seguence 12 BP; 0 A; 3 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                       Woessner RD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                    (HMRI ) HOECHST MARION ROUSSEL DEUT GMBH.
                                                                                                                                                                                                                                                                                                                                                                                                     Bitonti AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 17; 73pp; English.
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100.0%;
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                                                                                                                                                                                                                                                                                                 98EP-00114853.
                                                                                                                                                                                                                                                                                                                                  98EP-00114853.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Local 11, Conservative
To 11, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABH91814 standard; DNA; 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
05-JUN-2000 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTCTTTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-258586/23
                                                                                                                                           metastasis; ss.
                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                 07-AUG-1998;
                                                                                                                                                                                                                                                                                                                                  07-AUG-1998;
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                                                                                                                                                                                                                              EP979869-A1
                                                                                                                                                                                                                                                               16-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            metastasis.
                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABH91814;
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                                                                                                                                                                             Ношо
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15.3%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; tive 0; Mismatches 3; Indels

WO200177384-A2.

18-OCT-2001

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide primer SEQ ID NO 308635 for detecting SNP TSC0023137.
                                            Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            oet or oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                           Claim 1; SEQ ID NO 275485; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15.1%; Score 11; DB 1; Length 12; 100.0%; Pred. No. 6.8e+02; ative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 12 BP; 7 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABI08662 standard; DNA; 12
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nes 11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12 TGGTTTAATGT
WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-657177/75.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABI08662;
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Matches
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qq
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, and not also are also used for detecting cell type differentiation. ABC0010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oligonucleotide primer SEQ ID NO 275485 for detecting SNP TSC0003907.
                                                                                                                                                                                                                                                                                                                                       oet or oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 291807; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15.1%; Score 11; DB 1; Length 12; 100.0%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                              Berlin K;
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                                                                                                                06-APR-2001; 2001WO-IB000713
                                                                                                                                                               07-APR-2000; 2000DE-01019173
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Query Match

Matches

WO200177384-A2. Homo sapiens

18-OCT-2001

22-FEB-2002

ABH75494:

SULT 327

H75494/c

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RESULT 331
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        oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                    Oligonucleotide primer SEQ ID NO 271281 for detecting SNP TSC0002451
central nervous system, cardiovascular and metabolic disorders. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                        15.1%; Score 11; DB 1; Length 12; 100.0%; Pred. No. 6.8e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                           Oligonucleotide primer SEQ ID NO 361734 for detecting SNP TSC0052796.
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Best Local Similarity 100.6
....hes 11; Conservative
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944 TIGGITIAAIG 954
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Homo sapiens

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABE99899, ABH00010-ABH99989 and ABI000110-ABIS2073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic forms part of the printed specification, but ftp.wipo.int/pub/published_pot_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligonucleotide primer SEQ ID NO 371602 for detecting SNP TSC0058884.
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                                                                                                                                                                                                                              Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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06-APR-2001; 2001WO-IB000713
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ABI71629 standard; DNA; 12
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretracted genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but her circled in electronic format from MIPO at
                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
              Oligonucleotide primer SEQ ID NO 363471 for detecting SNP TSC0053873.
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Best Local Similarity
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Homo sapiens.

22~FEB-2002

ABI51405;

SULT 332 I51405/c

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Gaps

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Length 12;

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                                                                   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                    This invention describes novel oligonuclectide primers or peptide nucleic
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                 Claim 1; SEQ ID NO 371602; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                             Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC39989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, and ABF00010-ABF9080, are the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent din or form part of the printed specification, but was obtained in electronic format from WIPO at
central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                  Oligonucleotide primer SEQ ID NO 308634 for detecting SNP ISC0023137.
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                                                                ABI08661 standard; DNA; 12 BP.
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ABF78022;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
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and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00101-ABC9989, ABF00010-ABF99899, ABH0010-ABH99899 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                         Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;
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nes 11; Conservative
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15.1%; Score 11; DB 1; Length 13; 100.0%; Pred. No. 7.2e+02;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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944 TIGGITIAAIG 954
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Sequence 13 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 1 Other;

Berlin K;

(first entry)

22-FEB-2002

ABH12113;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Score 11; DB 1; Length 13;
Pred. No. 7.2e+02;
0; Mismatches 0; Indels
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943 ATTGGTTTAAT 953

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                 Oligonucleotide SEQ ID NO 212090 for detecting SNP TSC0051687.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
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                   designed to detect single-nucleotide polymorphisms and cycosine methylation status.
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oligonuclectides, useful for diagnosis and cell typing,
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                                                                                  Claim 1; SEQ ID NO 72150; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                      This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genemic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
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Best Local Similarity 100.
Matches 11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                  represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                           Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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07-APR-2000; 2000DE-01019173.
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                            (EPIG-) EPIGENOMICS AG
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                                                              Piepenbrock
                                                                                           WPI; 2001-657177/75
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Best Local Similarity
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 3 G; 7 T; 0 U; 1 Other;

Gaps ·. 15.1%; Score 11; DB 1; Length 13; 84.6%; Pred. No. 7.2e+02; tive 1; Mismatches 1; Indels ilarity 84.6%; Conservative Query Match Best Local Similarity Matches 11; Conserv

943 ATTGGTTTAATGT 955

1 ATTGGTTTTATGY 13

ABF48209 standard; DNA; 13 F48209/c SULT 351

BP.

(first entry) 21-FEB-2002

ABF48209;

Oligonucleotide SEQ ID NO 148206 for detecting SNP TSC0037419.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C,

Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 148206; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABE99989, ABH00010-ABE99989 and ABI00010-ABE8073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences

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         Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
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100.0%; Pred. No.
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947 GITIAAIGIAI 957 13 GTTTAATGTAT 3 qq

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RESULT 352 **ABH47706**

ABH47706 standard; DNA; 13

BP.

ABH47706;

(first entry) 22-FEB-2002

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Oligonucleotide SEQ ID NO 247683 for detecting SNP TSC0060535.

peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

Homo sapiens.

WO200177384-A2

18-OCT-2001.

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

¥ Berlin Piepenbrock C, olek A,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 247683; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formmat from WIPO at fit, wipo.int/pub/published_pot_sequences

Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

15.1%; Score 11; DB 1; Length 13; 100.0%; Pred. No. 7.2e+02; tive 0; Mismatches 0; Indels 11; Conservative Best Local Similarity Query Match Matches

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Gaps

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RESULT 353

ABC93441/c

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99999, ABH00010-ABF99999 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic formmat from WIPO at fire printed specification, but fire wipo.int/pub/published_pct_sequences
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                                 ABC93441 standard; DNA; 13 BP
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Best Local Similarity 84.69
Matches 11, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-657177/75
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
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                                                                                               ABC93441;
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RESULT 354

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Gaps

0

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WPI; 2001-657177/75
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Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine

Claim 1; SEQ ID NO 197139; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99899, ABH00010-ABH99899 and ABL00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

.. 15.1%; Score 11; DB 1; Length 13; 100.0%; Pred. No. 7.28+02; ive 0; Mismatches 0; Indels 11; Conservative Query Match Best Local Similarity Matches

ö

Gaps

SULT 356

ABF48208 standard; DNA; 13

BP.

ABF48208;

(first entry) 21-FEB-2002

Oligonucleotide SEQ ID NO 148205 for detecting SNP TSC0037419

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001.

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

ĸ, Berlin Olek A, Piepenbrock C,

WPI; 2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 148205; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PMA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a

Best Local Similarity

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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC09999, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, axidovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABF9989 and ABI00010-ABF82073 the represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oligonucleotide SEQ ID NO 178020 for detecting SNP TSC0044112.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 178020; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                         15.1%; Score 11; DB 1; Length 13; 100.0%; Pred. No. 7.2e+02; ive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                           Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 13 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 1 Other;
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                                                                                                                                                                                                                                                     ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABF78023 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        947 GTTTAATGTAT 957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Set of oligonucleotides,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTTTAATGTAT 11
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                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200177384-A2.
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ID ABF78023/C
XX ABF7803
XX ABF7803
XX ABF7803
XX CAFEB
XX SNP; S:
XM SNP; S:
XM SNP; S:
XM Central
XX Homo S:
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(MURD-) MURDOCH CHILDRENS RES INST.
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                        IGFBP3 oligonucleotide #1662.
                                                                                                                                                                                                                                 21-JUN-2000; 2000WO-AU000693
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 30-MAR-2001 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11; Conservative
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Best Local Similarity
                                                                                                                                                                                 WO200078341-A1
                                                                                                                                                                                                                                                                                                                                                                                            inflammation
                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                         21-JUN-1999;
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                                                                                                                                                                                                                                                                                                        Wraight CJ,
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                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
  Gaps
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                                                                                                                                                                                 Oligonucleotide SEQ ID NO 216000 for detecting SNP TSC0052522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 216000; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15.1%; Score 11; DB 1; Length 13; 100.0%; Pred. No. 7.2e+02;
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 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  was obtained in electronic format from Wl
ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                      Berlin
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                                                                                                          ВР
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                                                                                                         ABH16023 standard; DNA; 13
                        948 TITAAIGIAICGC 960
                                                                                                                                                        22-FEB-2002 (first entry)
                                             TTTAATGTATAGY 1
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 Conservative
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                                                                                                                                                                                                                                                        Homo sapiens
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11;
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                                                                                                                                 ABH16023;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 359
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Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid; skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein, IGFBP-2; IGFBP3; inflammation, psoriasis; pitaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasia; kidney disease; necovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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Pred. No. 7.9e+02;
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100.0%; Pred. No. ...
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schultz1-899.rng

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Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pitaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplania; soleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neoblation of the retina; ss.
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Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693

21-JUN-1999;

(MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Werther GA, Wraight CJ,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 55; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBB]-2 or IGFBB3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF4151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a neoplasias, scleroderma, warts, benign growths, cancers of the skin, a brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 0 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Gaps ; 0 15.1%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 7.9e+02; 0; Indels 0; Mismatches Best Local Similarity 100. Matches 11; Conservative Query Match

ó

942 s cccrccrcrrc 1s 932 CCCTCCTCTTC

AAS95645 standard; DNA; 15

BP,

AAS95645;

(first entry) 14-FEB-2002

Human NPY1R gene allele-specific oligonucleotide sequencing primer #6.

haplotyping, haplotype pair; single nucleotide polymorphism; genotyping, gene therapy; drug screening; cardiovascular disease; antidepressant; hypertension; cardiant; depression; probe; sequencing primer; PCR primer; Human; neuropeptide Y receptor Y1; NPY1R; ss; antiarteriosclerotic;

Human; Cytochrome P450; Subfamily XXVIIA; single nucleotide polymorphism; Seroid 2.7-Hydroxylase; Cerebrotendinous Xanthomatosis Polypeptide 1; CYP27A1; SNP; drug screening; cerebrotendinous xanthomatosis; allele specific oligonucleotide; ASO; primer; ss.

Human CYP27A1 gene polymorphism detection ASO primer #20.

(first entry)

13-AUG-2002

ABK81922;

BP.

ABK81922 standard; DNA; 15

RESULT 36: ABK81922/

13

g

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The invention relates to single nucleotide polymorphisms in the human neuropeptide Y receptor Y1 (NPY1R) gene. A method for haplotyping the NPY1R gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the NPY1R haplotypes given in the copies of the gene is defined by one of the NPY1R haplotypes given in the copies or method is useful in genotyping, whereby all possible haplotype pairs. This method is useful in genotyping, whereby all possible haplotype pairs can be assigned to specific genotypes. An association between a trait and comparing the frequency of the haplotype or haplotype pair in a reference population, where a higher haplotype or haplotype pair. NPY1R and its associated with the haplotype pair in a reference population indicates the trait is associated with constitution the trait population indicates the trait is associated with the haplotype or haplotype pair. NPY1R and its corresponding DNA are used for studying the expression and function of NPY1R, for use in screening cardiovascular diseases (e.g. hypertension) and depression. The sequences are also useful for studying the effect of variation on the biological cardiovascular diseases (e.g. hypertension) and depression. The sequences are also useful probes, sequencing primers, PCR primers and PCR primer considered universal tails used to detect NPY1R gene polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                           New isolated polynucleotide variant of neuropeptide Y receptor Y1 (NPYIR) for studying the function of NPYIR, and expressing NPYIR protein for use in screening candidate drugs to treat NPYIR-related diseases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 7 A; 1 C; 6 G; 0 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                       Lee HH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 15; Page 12; 48pp; English.
                                                                                                                                                                                                                                                                         (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                                                                                                                                                                                       Koshy B,
                                                                                                                                                                                07-MAY-2001; 2001WO-US014773.
                                                                                                                                                                                                                           05-MAY-2000; 2000US-0201950P.
PCR primer universal tail.
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                                                                                                                                                                                                                                                                                                                    Kliem SE,
                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-055579/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                    WO200185742-A2
                                           Homo sapiens.
                                                                                                                                  15-NOV-2001.
                                                                                                                                                                                                                                                                                                                       Choi JY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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(INNO-) INNOGENETICS NV SA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                           11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900 CCTGGTCATTT 910
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1991-072901/10.
                                                                                                                                                                                                               WPI; 1994-200296/24
                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                       correct PN field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       haemophilia B; ss.
                            WO9412670-A2
                                                                                  26-NOV-1993;
                                                                                                             27-NOV-1992;
31-AUG-1993;
                                                                                                                                                                                    Maertens G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9-MAY-1989;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-AUG-1987;
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                                                        09-JUN-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Davie EW,
 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ10578;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 364
                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      XXXIIA, (Steroid 27-Hydroxylase, Cerebrotendinous Kanthomatosis)
Polypeptide 1 (CYP27A1) polynucleotide. The polynucleotide of the invention comprises a sequence which is a polymorphic variant for a reference sequence for the CYP27A1 gene or its fragment, or a polymorphic variant of a reference sequence for a CYP27A1 condition or a polymorphic variant of a reference sequence for a CYP27A1 condition or a polymorphic variant with a candidate agent and assaying for binding activity. The invention is also useful in studying the expression and function of CYP27A1, and in expressing CYP27A1 protein for use in screening for candidate drugs to treat diseases related to CYP27A1 cativity, e.g. cerebrotendinous xanthomatosis. Other uses include for therapeutic purposes and for studying expression of the CYP27A1 isogenes in vivo, for in vivo screening and testing of drugs targeted against CYP27A1 protein, and for testing the efficacy of therapeutic agents and compounds for diseases associated with CYP27A1 activity, e.g. cerebrotendinous xanthomatosis, in a biological system. The invention is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cerebrotendinous xanthomatosis, in a biological system. The invention is useful for studying the effect of the variation on the biological activity of CYP27A1 as well as on the binding affinity of candidate drugs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present nucleic acid sequence represents one of a collection (ABK81903-ABK81930) of allele specific oligonucleotide (ASO) primers that were used in the invention to detect polymorphisms in the human CYP27A1
                                                                                                                                                                                                                                                                                                                            The present invention relates to a new human Cytochrome P450, Subfamily
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  targeting CYP27Al for the treatment of cerebrotendinous xanthomatosis.
                                                                                                                                                                                                                                           Hydroxylase, Cerebrotendinous Xanthomatosis 1 gene, useful for
therapeutic purposes, and for studying expression and function of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                           Novel isolated human Cytochrome P450, Subfamily XXVIIA, Steroid 27-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hepatitis C virus, HCV; probe, genotyping, hybridisation, non-A, non-B hepatitis; NANBH; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 5 A; 0 C; 6 G; 3 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Probe for HCV genotyping (HCV 2, subtype 2c).
                                                                                                                                                                    Sanchis A;
                                                                                                                                                                                                                                                                                                Claim 14; Page 14; 90pp; English
                                                                                                                                                                    Han J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAQ68033 standard; DNA; 16 BP
                                                                                                                                         (GENA-) GENAISSANCE PHARM INC
                                                                                 15-OCT-2001; 2001WO-US042727.
                                                                                                             13-OCT-2000; 2000US-0239942P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        924 CCTTTTATCCTC 936
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Best Local Similarity 84.6
Matches 11; Conservative
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                                                                                                                                                                    Chew A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (revised)
                                                                                                                                                                                                WPI; 2002-435436/46
                          WO200230952-A2
                                                                                                                                                                    Anastasio AE,
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAR-2003
16-DEC-1994
                                                      18-APR-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 363
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Process for genotyping Hepatitis C virus (HCV) isolates - utilises probes hybridising to HCV isolate domains.
                                                                                                                                                                                                                                                                                                                                                                                                                           HCV
4b,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                      Genotyping HCV utilises probes hybridising to HCV isolate domains. types 2, 3, 4, 5 or 6 and subtypes 1a, 1b, 2a, 2b, 3a, 3b, 3c, 4a, 4c, 4f, 4g and 4h can be typed. (Updated on 25-WAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human factor IX; genetic deficiencies; blood clotting disorders;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                   Van Heuverswyn H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 16 BP; 1 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
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100.0%; Pred. No. o...
                                                                                                                                                                                   Stuyver L, Rossau R,
                                                                                                                                                                                                                                                                                                                                                                       Claim 6; Page 67; 96pp; English.
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87US-00094031.
                                                 92EP-00403222
93EP-00402129
93WO-EP003325
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schultz1-899.rng

Disclosure; Page 7; 12pp; English.

This probe is used to screen a human liver cDNA library for the presence of a clone (pHFIX1) contg. the coding information for human factor IX. of a clone (pHFIXI) contg. the coding information for human factor IX. The recombinant DNA clone is useful for detect- ing mutations or other genetic deficiencies concerned with factor IX. It can also be used to diagnose blood clotting deficiencies e.g. haemophilia B. The use of recombinant DNA methods results in the large scale expression of hFIX polypeptides. See also AAQ10577 and AAQ10579

Sequence 14 BP; 2 A; 3 C; 1 G; 8 T; 0 U; 0 Other;

Gaps ; 0 Score 10.8; DB 1; Length 14; Pred. No. 8.1e+02; Indels 0; Mismatches 14.8%; Query Match
Best Local Similarity 85.7
Matches 12; Conservative

918 TCTTTGCCTTTTAT 931 rarrrecerrrear 14

SULT 365

V65725

AAV65725 standard; DNA; 14

BP.

AAV65725;

(first entry) 10-DEC-1998 Oligonucleotide used in the course of the invention.

Werner's syndrome; diagnosis; ss.

Synthetic.

JP10201498-A

04-AUG-1998.

97JP-00011268 24-JAN-1997; 97JP-00011268 24-JAN-1997;

(EIJI-) EIJIN KENKYUSHO KK.

WPI; 1998-474499/41.

Detection of mutation in gene causing human Werner's syndrome - and oligo:nucleotide used for detection, comprises amplifying DNA and synthesising oligo:nucleotide.

Claim 7; Page 9; 17pp; Japanese

Oligonucleotides AAV65723-25 are used in the course of the invention. The specification describes the detection of a mutation in a gene causing human Werner's syndrome. The method comprises amplifying a DNA fragment containing a mutation at position 733, 734, 1620 or 4146 of AAV65701 or the pass at position 42 of AAV65702 and synthesising an oligonuclectide so that the base at the above site comes to be the 3' end based on the base sequence of AAV65701-02, or an oligonucleotide in which the base adjacent to the 3' end comes to be the 5' end. The oligonucleotides are hybridised with the resultant amplified fragment. The method can be used to diagnose Werner's syndrome

Sequence 14 BP; 0 A; 1 C; 1 G; 12 T; 0 U; 0 Other;

Gaps . 0 Score 10.8; DB 1; Length 14; Pred. No. 8.1e+02; Indels 0; Mismatches 14.8%; 85.7%; Query Match
Best Local Similarity 85.7
Matches 12; Conservative

RESULT 366 AAV48874

BP. AAV48874 standard; DNA; 14

AAV48874;

(first entry) 15-0CT-1998 ErbB-2 gene antisense oligonucleotide ErbB-2-N-83

ErbB-2; antisense oligonucleotide; modulate; gene expression; ss

Synthetic.

; 0

Homo sapiens

EP856579-A1.

05-AUG-1998.

97EP-00101531. 31-JAN-1997;

97EP-00101531, 31-JAN-1997; (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.

Brysch W; Schlingensiepen K,

WPI; 1998-400910/35

Preparation of antisense oligo:nucleotide(s) which lack long runs of consecutive guanosine or inosine – and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapeutically or to modulate growth of cells in culture.

Example 4; Fig 6d; 286pp; English.

AAV48709-886 represent antisense oligomucleotides directed against the ExbB-2 gene. Of these, only oligomucleotides AAV48709-91 resulted in ExbB-2 gene. Of these, only oligomucleotides AAV48709-91 resulted in coligomucleotides AAV48728-886 had little effect. The oligomucleotides AAV48728-886 had little effect. The oligomucleotides and three hydrogen bilittle effect. The oligomucleotides and three hydrogen bonds to cytosine; do not contain four consecutive mucleotides able to form three H-bonds each to four consecutive cytosines; do not contain two sequences of three consecutive cytosines, and the ratio between residues able to form two H-bonds each collgomucleotides are used to modulate expression of genes, particularly the genes for p53, ErB-2, junB, junD, TGP-beta 1 or beta 2 to control cytosines can also be used to analyse function of proteins (by collgomucleotides are used to machine expression of genes, particularly colligomucleotides are used to analyse function of proteins (by altering their expression or activity) and therapeutically, e.g. in cases collgomucleotides can also be used to analyse function of proteins (by altering their expression or activity) and therapeutically, e.g. in cases consecution of proteins (by consecutive) and therapeutically, e.g. in cases

Sequence 14 BP; 1 A; 2 C; 1 G; 10 T; 0 U; 0 Other;

Gaps 0; Length 14; Indels Score 10.8; DB 1; Pred. No. 8.1e+02; 0; Mismatches 2; 14.8%; 85.7%; Local Similarity 85.7 es 12; Conservative Query Match Matches

0

TITCTIIGGICTII 922 TTTATTTCGTCTTT 606

ö g

AAQ55453/c ID AA0554 RESULT 367

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BP. AAQ55453 standard; DNA; 15 schultz1-899.rng

Page 191

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Claim 2; Page 269; 407pp; English.
                                                                                                                                                                                              94US-00228041.
94US-00245736.
94US-00291932.
94US-00291433.
94US-0029520.
94US-00303030.
94US-00311448.
94US-00311449.
94US-00311449.
94US-00319432.
94US-00319432.
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94US-00222795
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94US-00357577
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                                                       Respiratory syncytial virus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 85.7 ies 12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Stinchcomb DT,
                                                                                                                                                                                                                                                                                                         23-SEP-1994;
28-SEP-1994;
03-OCT-1994;
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15-APR-1994;
18-MAY-1994;
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04-NOV-1994;
10-NOV-1994;
28-NOV-1994;
                                                                            409523225-A2
                                                                                                                      23-FEB-1995;
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23-SEP-1994;
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                                                                                                                                                                                                                                                                                                                                                                       The primers (AAO55452-62) are use to detect mutations within the cystic fibrosis gene. The primers are designed to be complementary to eight of the most common mutations within the CF gene. Detection is carried out the incorporation of a labelled dideoxymucleotide. Individuals carrying
                                                                                                                                                                                                                                                                                                                                                                                                                                          t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                  the mutation incorporate a different base as opposed to normal individuals. This primer detects the delta-507 mutation site by the incorporation of ddATP as opposed to ddGTP. (Updated on 25-MAR-2003
                                                                                                                                                                                                                                                                                                                 Determining identity of nucleotide base - by using primer extension process, useful for typing of samples and genotype identification.
                                                                                    Cystic fibrosis; CF; mutation; detection; primer extension; typing; genotype identification; biotinylated; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bor-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RSV 1C hammerhead ribozyme target sequence (nt. position 163).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14.8%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 8.5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 8 A; 3 C; 3 G; 1 T; 0 U; 0 Other;
                                                              Detection primer for cystic fibrosis mutation.
                                                                                                                                                                                                                                                                                                                                                   Example A; Page 24; 42pp; English.
                                                                                                                                                                                    93WO-US006364.
                                                                                                                                                                                                        92IL-00102382.
92US-00919872.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (revised)
(first entry)
                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 85.7 tes 12; Conservative
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                               (revised)
                                                                                                                                                                                                                                        ERIPHYLE BV.
FRIEDMAN M M.
                                                                                                                                                                                                                                                                                              WPI; 1994-034981/04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   correct PN field.)
                                                                                                                                        WO9401447-A1
                                                                                                                                                                                                        02-JUL-1992;
                                                                                                                                                                                                                     27-JUL-1992;
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25-MAR-2003
                             25-MAR-2003
                                          19-JUL-1994
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                                                                                                                                                              20-JAN-1994
                                                                                                                    Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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                                                                                                                                                                                                                                        (ERIP-)
                                                                                                                                                                                                                                                                       Eyal N;
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Matches
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Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Tracz D, Usman N, Wincott FE, Woolf T;
transplant rejection; rheumatoid arthritis; psoriasis;
myocardial ischaemia; Kawasaki disease; septic shock; HIV;
human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for protein of respiratory syncytial virus (RSV) at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the target sequences and can be used for treatment and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15 BP; 8 A; 2 C; 0 G; 0 T; 5 U; 0 Other;
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o DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SW, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                               Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; INF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; attoke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial infarction; stroke; psoriasis; myocardial; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                RSV 1C hammerhead ribozyme target sequence (nt. position 164).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94US-00218934.
94US-00224243
94US-00224263.
94US-00227536.
94US-0021932.
94US-00291433.
94US-00291433.
94US-00291433.
94US-00291433.
94US-0039120.
94US-0039120.
94US-0039120.
94US-00311449.
94US-003114439.
94US-00314439.
                                                                                                                BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Respiratory syncytial virus
                                                                                                                                                                                        (revised)
(revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (RIBO-) RIBOZYME PHARM INC.
                                                                                                                AATS7036 standard; RNA; 15
                       N
Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-AUG-1994;
02-SEP-1994;
08-SEP-1994;
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23-SEP-1994;
28-SEP-1994;
03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
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18-MAY-1994;
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                                                                                                                                                                                        27-AUG-2003
25-MAR-2003
                                                                                                                                                                                                                             24-APR-1997
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Modak A,
Tracz D,
                                                                                                                                                     AAT57036;
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Ribozymes having modified bases and methods for producing them - for use

WPI; 1995-351090/45

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Enzymatic nucleic acid molecules having a hammer-head motif - used for
the treatment of arthritis, induction of graft tolerance or treatment of
                                                                          for a
                                                                       enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a protein of respiratory syncytial virus (RSV) at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and haippin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the target sequences and can be used for treatment and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stinchcomb DT, Jarvis T, Draper K, Pavco P; Gustofson J, Usman N, Wincott F, Matulic-Adamic J; Thompson JD, Modak A, Burgin A;
                                                           present sequence represents a preferred target sequence for an
                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                            14.8%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 8.5e+02;
                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human B7-1 hammerhead ribozyme target SEQ ID NO:1409.
                                                                                                                                                                                                                                               Sequence 15 BP; 7 A; 3 C; 0 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                             0; Mismatches
in inhibiting disease related genes.
                             Claim 2; Page 269; 407pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94US-00354920.
94US-00363253.
94US-00363254.
95US-00390850.
95US-00436124.
95US-00434509.
95US-0000951P.
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95US-00541365.
                                                                                                                                                                                                                                                                                                                                            944 TTGGTTTAATGTAT 957
                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX64777 standard; RNA; 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                       14 rragrraaarcrar 1
                                                                                                                                                                                                                                                                                                             12; Conservative
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                                                                                                                                                                                                                                                                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Beigelman L,
Mcswiggen J,
Karpeisky A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-DEC-1994;
17-FEB-1995;
20-APR-1995;
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23-DEC-1994;
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07-JUL-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX64777;
                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 370
AAX64777
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The present invention describes a novel enzymatic nucleic acid (ENA)
having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
(c) (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
can inhibit collagenase and stromelysin production in the synovial
can inhibit collagenase and stromelysin production of arthritis.

Community osteoarthritis or rheumatoid arthritis. The ENA's can also
be used to treat antigen presenting cells of a donor to induce tolerance
in a recipient to an alloantigen of a donor. They can also be used for
chlancing graft tolerance or for treating autoimmune disease, and for
treating allergies and other inflammatory conditions. The ENA's can also
be used in diagnosis. Ribozyme therapy impacts on the expression of
expression which accompany treatment with retinoids and dexamethasone.

CThe concentration of ribozyme required to affect a therapeutic treatment
specific. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14.8%; Score 10.8; DB 1; Length 15; 42.9%; Pred. No. 8.5e+02; rative 6; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 5 A; 1 C; 2 G; 0 T; 7 U; 0 Other;
                                                 Claim 10; Page 168; 307pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             943 ATTGGTTTAATGTA 956
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6; Conservative
auto-immune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   specific. The prepresent invention
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Gaps .,

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Target sequence with sequence homology to c-raf and B-raf position 1603.
BP
AAV93860 standard; RNA; 15
            18-FEB-1999 (first entry)
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Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme; target; substrate; catalyst; modulation; expression; Raf gene; delivery; screening; identification; synthesis; deprotection; purification; cancer; inflammation; psoriasis; non-hepatic ascites; infection; genetic drift; restenosis; rheumatoid arthritis; ss.

Homo sapiens

12-NOV-1998.

WO9850530-A2

98WO-US009249 05-MAY-1998;

970S-0049002P. 970S-0051718P. 970S-0056808P. 970S-0061321P. 970S-0061324P. 97US-0046059P. 09-MAY-1997; 09-JUN-1997 22-AUG-1997

.0064866P 97US-0068212P -Sn/6 19-DEC-1997; 02-OCT-1997 02-OCT-1997 05-NOV-1997

(RIBO-) RIBOZYME PHARM INC.

Bellon L; Burgin A; Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Beigelman L, Mcswiggen JA, Karpeisky P J, Workman CT, Beaudry A, Sweedler D; Parry I, Be Thompson J,

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Amethod has been developed for the identification of a nucleic acid
capable of modulating a process in a biological system. The method
comprises: (a) introducing into the system a random library of nucleic
acid catalysts (NAC) having a substrate binding domain (BD), comprising
a random sequence, and a catalytic domain (CD); and (b) identifying NAC
consistems where modulation has occurred and/or determining the sequence
of at least part of the SBDs in such systems. Nucleic acid molecules with
condonuclease activity and catalytic activity, from the present invention,
consistent part of the SBDs in such systems. Nucleic acid molecules with
condonuclease activity and catalytic activity, from the present invention,
coleave target nucleic acid, particularly for treating systemic diseases
caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
cutsed to treat cancer, restencist, psoriasis or theumatoid arthritis, or
cutsed to treat cancer, restencists, psoriasis or rheumatoid arthritis, or
generally any condition associated with the level of c-raf. Introduction
of sugar/phosphate modifications increases stability against nuclease and
cativity. AAV999222 to ASV938A77 represent NACs that can be used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
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                                                 Identifying new catalytic nucleic acid that modulates selected processes - especially ribozymes that cleave Raf RNA for treating cancer, restenosis, and also new ribozymes and modified nucleoside triphosphates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 method, specifically for modulating the expression of a Raf gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 2 A; 5 C; 2 G; 0 T; 6 U; 0 Other;
                                                                                                                                 used as antiviral agents and synthons.
                                                                                                                                                                                        Claim 180; Page 177; 259pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             933 CCTCCTCTTCATTG 946
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WPI; 1999-009494/01.
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Uracil DNA glycosylase; UDG; infectious disease detection; cancer; sickle cell anaemia; cystic fibrosis; thalassaemia; muscular dystrophy; Tay-Sachs disease; ss. Cystic fibrosis gene UDG-digest fragment SEQ ID #7. (first entry) 01-DEC-2000

BP.

AAA72650 standard; DNA; 15

RESULT 372 AAA72650/c

AAA72650;

Synthetic.

US6090553-A. 18-JUL-2000.

97US-00959853. 97US-00959853. 29-OCT-1997; 29-OCT-1997;

(BECI) BECKMAN COULTER INC.

Matson RS;

WPI; 2000-531416/48.

Detecting specific nucleic acid sequence in sample containing nucleic acids involves amplifying nucleic acid, cleaving amplified products with uracil-DNA glycosylase to obtain DNA segments and detecting segments.

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Example 3; Col 17; 21pp; English
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A new method for detecting specific nucleic acid sequences in a sample involves amplifying the nucleic acid sample by PCR and then cleaving the amplified products with uracil DNA glycosylase (UUG), the resulting DNA fragments are detected using reverse blot hybridisation techniques. The method can be used to distinguish between two different sequences, for example for the detection of a DNA fragment carrying a mutation. The method is useful for detecting the presence or absence of a nucleic acid sequence containing a polymorphic restriction site associated with a diseases such as cystic fibrosis disease, and may be used for detecting infectious diseases. Genetic disorders such as sickle cell anaemia, cystic fibrosis, alpha or beta thalassaemia, muscular dystrophy, and Tay-Sachs disease may also be detected using the method. Oncogenes such as RAS may also be detected using the method. Oncogenes such as fibrosis (CP) gene created by UDG cleavage. This sequence is used in an example of the invention and contains the position of a mutation site in the CF gene. This fragment and the corresponding mutant containing fragment (AAA72651) can be used to produce probes specifically to identify the mutation, which can then be used in the method of the invention

Sequence 15 BP; 9 A; 3 C; 3 G; 0 T; 0 U; 0 Other;

ô Gaps 0; Score 10.8; DB 1; Length 15; Pred. No. 8.5e+02; Indels 0; Mismatches 14.8%; 85.7%; Matches 12; Conservative Query Match Best Local Similarity

SULT 373

AAF47624 standard; DNA; 15 BP.

AAF47624;

30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1044.

Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like, Growth Factor I receptor, IGF-1; pityriasis; IGF binding protein, IGFB-2; IGFB23; inflammation, psoriasis; pilatis; growth factor mediated cell proliferation, ichthyosis; serborrhoea; ruba, keratosis, neoplasia, scaleroderma, wart; skin cancer; sclerotic disease; hyperneovascular condition, hyperplasis, kidney disease; neoplasis, neoplasis, scalerotic disease; neovascular condition, condition, ss.

Ношо

WO200078341-A1.

28-DEC-2000

21-JUN-2000; 2000WO-AU000693

99US-0140345P 21-JUN-1999; Edmondson SR; Werther GA, S. Wraight

(MURD-) MURDOCH CHILDRENS RES INST.

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

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                                                                              The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF] receptor, IGF binding protein [IGFBP] 2 or IGFBPB), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153 - PA5161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, ruba, planis, serbornhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14.8%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 8.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15 BP; 6 A; 4 C; 4 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                          Example 7; Page 50; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901 CTGGTCATTTTCTT 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15 CTGGTCATGTCCTT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 85.7
Matches 12; Conservative
inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein, IGFBP-2; IGFBP3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation, ichthyosis; serborrhoea; ruba; keratosis; neophasia; scaleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition, hyperplasia; kidney disease; neobascular condition of the retina; ss. IGF-I oligonucleotide #3137. AAF52177 standard; DNA; 15 (first entry) 30-MAR-2001 AAF52177; RESULT 37

99US-0140345P. 21-JUN-2000; 2000WO-AU000693 WO200078341-A1. Homo sapiens. 21-JUN-1999; 28-DEC-2000.

(MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Wraight CJ, Werther GA,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 81; 201pp; English

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The present invention relates to a method for ameliorating the effects of anticorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF] receptor, IGF binding protein [IGFBP] - 2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF4151 and AAF45151-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, incoplasias, scleroderma, warts, benign growths, cancers of the skin, hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                 vessels or any other hyperplasia
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Sequence 15 BP; 7 A; 3 C; 2 G; 3 T; 0 U; 0 Other;

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0
14.8%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 8.5e+02; ive 0; Mismatches 2; Indels
              85.78;
                                                           941 TCATTGGTTTAATG 954
                                                                                      rcacrerrrraard 2
                               Conservative
               Best Local Similarity
                             12;
 Query Match
                               Matches
                                                           à
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0;

Gaps

AAF53514 standard; DNA; 15 30-MAR-2001 (first entry)

IGF-I oligonucleotide #4474.

BP

Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic; dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1, pityriasis, IGF binding protein, IGFBP-2, IGFBP3, inflammation, psoriasis, pilaris, growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, keratosis; neoplasia; scleroderma, wart, skin cancer; sclerotic disease, hypermeovascular condition; hyperplasis, kidney disease; neovascular condition of the retina; ss.

Homo sapiens

WO200078341-A1

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693

99US-0140345P. 21-JUN-1999;

(MURD-) MURDOCH CHILDRENS RES INST.

Werther GA, Edmondson SR;

WPI; 2001-041421/05

Wraight CJ,

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation

Example 8; Page 90; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

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               inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliocating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kinney disease, hyperpoliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBPB], which is capable of infibiting or reducing growth factor mediated cell proliferation, infilammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                 Gaps
  inhibiting or reducing growth factor mediated cell proliferation,
                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                    / Match 14.8%; Score 10.8; DB 1; Length 15; Local Similarity 85.7%; Pred. No. 8.5e+02; nes 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                Sequence 15 BP; 0 A; 7 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 8; Page 90; 201pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-0140345P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IGF-I oligonucleotide #4475.
                                                                                                                                                                                                                                                                                                                                                                        927 TTTATCCCTCCTCT 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF53515 standard; DNA; 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-041421/05.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-JUN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF53515;
                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 376
                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAF5351
886666666666888
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F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovyscular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 0 A; 7 C; 0 G; 8 T; 0 U; 0 Other;

ö Gaps ., Local Similarity 85.7%; Pred. No. 8.5e+02; Length 15; les 12; Conservative 0; Mismathleit Query Match Best Local S Matches

SULT 377

BP AAF47625 standard; DNA; 15

AAF47625;

(first entry) 30-MAR-2001

IGFBP3 oligonucleotide #1045.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBF-2; IGFBF3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplama; kidney disease; neoblation of the retina; ss.

Homo sapiens.

WO200078341-A1

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

99US-0140345P 21-JUN-1999; (MURD-) MURDOCH CHILDRENS RES INST

Edmondson SR; Werther GA, Wraight CJ,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 51; 201pp; English.

The present invention relates to a method for ameliorating the effects of akin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-IRe Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, planis, serbornhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina,

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skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBB3), which is capable of inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-C P45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, chhopreovascular condition auch as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense therapy, antiproliferative; antiinflammatory, antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neobascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to a method for ameliorating the effects of
                                                                                                                                                          Gaps
or skin, growth factor-mediated malignancies, other sclerotic
se, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                          .;
                                                                                                                   Length 15;
                                                                                                                                                        2; Indels
                                                                             Sequence 15 BP; 6 A; 4 C; 4 G; 1 T; 0 U; 0 Other;
                                                                                                                 Score 10.8; DB 1;
Pred. No. 8.5e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 8; Page 81; 201pp; English
                                        vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                     14.8%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-JUN-2000; 2000WO-AU000693.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   IGF-I oligonucleotide #3139.
                                                                                                                                                                                                901 CTGGTCATTTTCTT 914
                                                                                                                                                                                                                                                                                                                                    AAF52179 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                             30-MAR-2001 (first entry)
                                                                                                                                                                                                                                     14 crecrearearerri 1
                                                                                                                                       Best_Local Similarity 85.7
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wraight CJ, Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-041421/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                          AAF52179;
                        disease,
                                                                                                                     Query Match
      brain
                                                                                                                                                                                                                                                                                               RESULT 378
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      à
                                                                                                                                                                                                                                     a
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RESULT 379

0.0

Matches

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The present sequence is a probe used to detect polymorphisms in the human costeoclastogenesis inhibitory factor (TWRSF11B). Polymucleotides comprising one or more of twenty four novel single nucleotide polymorphisms in the TWRSF11B gene have been identified. TWRRSF11B regulate osteoclast recruitment and function. An understanding of variations in the gene should thus be useful in developing new therapies for metabolic disorders caused by abnormal osteoclast recruitment and function such as osteoporosis, metastatic bone disease, Paget's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's disease and rheumatoid arthritis.
                                                                                                                                                                                                                                                    single nucleotide polymorphism; SNP; osteoclast recruitment; osteoclast function; osteocparosis; metastatic bone disease; baget's disease; rheumatoid arthritis; periodontal bone disease; ASO; allele-specific oligomucleotide; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; platelet activating factor receptor; PTAFR; isogene; cancer; chromosome 1; inflammatory disease; coronary disease; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 10.8; DB 1; Length 15; Pred. No. 8.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2; Indels
                                                                                                                                                                                                                          TNFRSF11B; osteoclastogenesis inhibitory factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ASO probe for platelet activating factor receptor gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rheumatoid arthritis and periodontal bone disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 4 A; 3 C; 1 G; 7 T; 0 U; 0 Other;
                                                                                                                                                         Human TNFRSF11B gene ASO probe, SEQ ID NO: 105.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Duda A, Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 15; Page 23; 114pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABL59300 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-JUL-2000; 2000WO-US018803.
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                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Denton RR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-147175/15
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-JUL-1999;
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                                                                                                 18-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-JAN-2001.
                                   AAF70049;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chew A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's disease and rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, TNFRSF11B; osteoclastogenesis inhibitory factor;
single nuclectide polymorphism; SNP; osteoclast recruitment;
osteoclast function; osteoporosis; metastatic bone disease;
Paget's disease, rheumatoid arthritis; periodontal bone disease; ASO;
allele-specific oligonucleotide; probe; ss.
                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                          14.8%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 8.5e+02; Live 0; Mismatches 2; Indels
                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
BP; 8 A; 2 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 3 A; 3 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human TNFRSF11B gene ASO probe, SEQ ID NO: 103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 15; Page 23; 114pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                             ВР
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF70049 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-JUL-2000; 2000WO-US018803.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Duda A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-0143020P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      919 CTTTGCCTTTTATC 932
                                                                                                                                                                                      TTCATTGGTTTAAT 953
                                                                                                                                                                                                                                                                                                                                                                                                      AAF70047 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                 TTCACTGTTTTAAT 1
                                                                                                                           Conservative
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                                                                                    Local Similarity
Les 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
les 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200104137-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
Sequence 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-APR-2001
                                                                                                                                                                                      940
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                                                             Query Match
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Gaps

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RESULT 380

AAF70049

Matches

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LEE P.
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                                                                                                                                                                                                                                                                                Blatt L, N
Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                         infection
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                                                                                                                                                                       (MORR/)
(PAVC/)
                                                                                                                                                                                                                          (DRAP/)
(ROBE/)
                                                                                                 (RIBO-)
                                                                                                                     (BLAT/)
(MACE/)
                                                                                                                                                        MCSM/)
                                                                                                                                                                                                          (LEEP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 383
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à
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                                                                                                                                                                                                                                                                                                                            The present sequence represents an allele-specific oligonucleotide (ASO) probe which is used for detecting polymorphisms in the human platelet Activating Factor Receptor (PTAR) gene. The gene comprises polymorphic sites referred to as PSI-5 to designate the order in which they are located in the gene. Six isogenes of the PTARR gene exist. The PTARR gene is located on chromosome 1, and contains 1 exon. Polymorphisms PS3 and PS5 have previously been identified. PS3 and PS5 occur in the coding region. The polynucleotide comprising polymorphisms in the PTARR gene is useful in screening candidate drugs to treat diseases related to PTARR isogenes are especially useful for treating these diseases. The methods and haplotypes are useful in improving these diseases. The candidate drugs for treating the efficiency of drug candidate drugs for treating the specific condition or disease described
                                                                                                                                                                                                                          Activating Factor Receptor (PTARR) gene, useful for treating or screening drugs for treating e.g. inflammatory diseases, coronary diseases or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative, disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                            New genetic variants comprising haplotypes of the human Platelet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14.8%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 8.5e+02; 1ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15 BP; 0 A; 1 C; 3 G; 10 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HBV enzymatic nucleic acid substrate sequence #63.
                                                                                                                                                                                                                                                                                                Claim 15; Page 13; 59pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                     (GENA-) GENAISSANCE PHARM INC.
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                                 05-NOV-2001; 2001WO-US047441.
                                                                2000US-0245633P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ilarity 85.7%;
Conservative
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                                                                                                                                        Chew A, Choi JY, Koshy B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACD56140 standard; RNA; 15
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                                                                                                                                                                           WPI; 2002-566672/60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hepatitis B virus.
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                                                                  03-NOV-2000;
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04-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACD56140;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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D56140

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The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes. DNAzymes, concerning and enzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV CM. The nucleic acids may be used to modulate the expression of HBV compounds and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds computed to the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HBV companding nucleic acid sequences disclosed in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         inozyme; zinzyme;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pavco
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15 BP; 2 A; 5 C; 1 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14.8%; Score 10.8; DB 1;
42.9%; Pred. No. 8.5e+02;
Live 6; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 213; 387pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
08-JUN-2001; 2001US-00877478.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
                                                                                                         05-DEC-2001; 2001US-0337055P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           929 TATCCCTCCTCTTC 942
                                                                                                                                                                                RIBOZYME PHARM INC. BLATT L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    :|: ||:| :|::|
UAUGCCUCAUCUUC 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Macejak D,
Roberts E;
                                                                                                                                                                                                                          BLATT L.
MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
PAVCO P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-229207/22.
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                        DRAPER K.
ROBERTS E.
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The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes. DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HBV will envention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocallular expression such as cirrhosis, liver failure, and hepatocallular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     carcinoma. The present sequence represents a substrate for one of the HBV enzymatic nucleic acid sequences disclosed in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ٠<u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14.8%; Score 10.8; DB 1; Length 15; 42.9%; Pred. No. 8.5e+02; live 6; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 2 A; 6 C; 1 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcswiggen J, Morrissey D,
virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 214; 387pp; English.
                                                                                                                                                                        26-MAR-2001; 2001US-00817879.
08-JUN-2001; 2001US-00877478.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
                                                                                                                                         26-MAR-2002; 2002WO-US009187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 929 TATCCCTCCTCTTC 942
                                                                                                                                                                                                                                                                                  RIBOZYME PHARM INC.
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UAUGCCUCAUCUUC 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-DEC-2003 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Macejak D,
Roberts E;
                                                                                                                                                                                                                                                                                               BLATT L.
MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-229207/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                  Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                           ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                       DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                        PAVCO P.
                                                                     WO200281494-A1.
                                                                                                                                                                                                                                                                                                                                                                                       LEE P.
                                                                                                        17-0CT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                , 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Blatt L, N
Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADC66181;
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                                                                                                                                                                                                                                                                                                                                                                      (PAVC/)
(LEEP/)
                                                                                                                                                                                                                                                                                                 (BLAT/)
(MACE/)
                                                                                                                                                                                                                                                                                                                                                                                                                         (ROBE/)
                                                                                                                                                                                                                                                                              (RIBO-)
                                                                                                                                                                                                                                                                                                                                                    (MORR/)
                                                                                                                                                                                                                                                                                                                                     (MCSM/)
                                                                                                                                                                                                                                                                                                                                                                                                           (DRAP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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The present invention describes a method for typing at least two variable sites of at least one nucleic acid molecule related to cystic fibrosis. The method comprises: (a) providing at least one nucleic acid molecule of a gene related to cystic fibrosis; (b) providing at least one extension primer, which binds to different predetermined sites in the nucleic acid molecule. Where at least one extension primer is designed to extension at least two potential variable sites in the nucleic acid molecule, and nucleotide; (c) simultaneously or sequentially performing primer at least two potential variable sites in the nucleic acid molecule, and nucleotide; (c) simultaneously or sequentially performing primer catenorized reactions; and (d) determining the pattern of nucleotide incorporation to obtain a test pattern; optionally (e) comparing the test pattern of step (c) with one or more reference patterns, in order to type diagnosing the genetic predisposition of states, diseases and drug response related to the human cystic fibrosis transmembrane conductance comprising at least one extension primer. The method is useful for typing comprising at least one extension primer. The method is useful for typing at least two variable sites of at least one nucleic acid molecule related to cystic fibrosis. The present sequence represents an oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Typing at least two variable sites of at least one nucleic acid molecule related to cystic fibrosis by simultaneously or sequentially performing primer extension reactions and determining the pattern of nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        to cystic fibrosis. The present sequence represents an oligonucleotide which is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                               cystic fibrosis transmembrane conductance regulator; CFTR; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         typing; variable site; cystic fibrosis; human; cystic fibrosis transmembrane conductance regulator; CFTR; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14.8%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 8.5e+02; rive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 2 A; 1 C; 3 G; 9 T; 0 U; 0 Other;
                                                              typing; variable site; cystic fibrosis; human;
                 Human CFTR related oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human CFTR related oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 6; Fig 3; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                          07-MAR-2003; 2003WO-SE000394.
                                                                                                                                                                                                                                                                                                                 07-MAR-2002; 2002SE-00000695.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  909 TTTCTTTGGTCTTT 922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADC66180 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATCTTTGGTGTTT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                         (PYRO-) PYROSEQUENCING AB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 85.7 tes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-731684/69.
                                                                                                                                                                                     WO2003074737-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        incorporation.
                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                 Schiller A,
                                                                                                                                                                                                                               12-SEP-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-DEC-2003
                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADC66180;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADC66180
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Paulin LG;

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Demonstrating genetic identity or diversity, genomic variation or polymorphisms, allelic variation and co-dominant scoring in a population pool, useful for genotyping, comprises detecting a mobile element and its
                                                                                                                                         (BORE-) BOREAL PLANT BREEDING LTD.
                                                                                              30-JAN-2002; 2002FI-00000176.
                                                       29-JAN-2003; 2003WO-FI000071.
                                                                                                                                                                                                                      WPI; 2003-646156/61.
                                                                                                                                                                                                                                                                                                                              integration site.
                                                                                                                                                                                  Schulman AH,
                 07-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABK55515;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes a method for typing at least two variable sites of at least one nucleic acid molecule related to cystic fibrosis. The method comprises: (a) providing at least one nucleic acid molecule of a gene related to cystic fibrosis; (b) providing at least one extension primer, which binds to different predetermined sites in the nucleic acid molecules, where at least one extension primer is designed to extend over at least two potential variable sites in the nucleic acid molecule, and nucleotide; (c) simultaneously or sequentially performing primer extension reactions; and (d) determining the pattern of nucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               diagnosing the genetic predisposition of states, diseases and drug response related to the human cystic fibrosis transmembrane conductance regulator (CFTR) gene; and (2) a kit for use in the method for typing comprising at least one extension primer. The method is useful for typing at least two variable sites of at least one nucleic acid molecule related to cystic fibrosis. The present sequence represents an oligonucleotide which is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    incorporation to obtain a test pattern; optionally (e) comparing the test pattern of step (c) with one or more reference patterns, in order to type the variable sites of the nucleic acid molecules. Also described: (1)
                                                                                                                                                                                                                                                                                                                                                                Typing at least two variable sites of at least one nucleic acid molecule related to cystic fibrosis by simultaneously or sequentially performing primer extension reactions and determining the pattern of nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genetic identity; mobile element; ME; genotyping; phylogenetic study; medical diagnostic; forensic science; pedigree analysis; haplotyping; breeding; maize; heartbreaker; Hbr7; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Maize heartbreaker (Hbr7) gene right flanking region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 2 A; 1 C; 3 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 6; Fig 3; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAD58084 standard; DNA; 16 BP.
                                                                                                                                                               07-MAR-2003; 2003WO-SE000394
                                                                                                                                                                                                       07-MAR-2002; 2002SE-0000695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            909 TTTCTTTGGTCTTT 922
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                                                                                                                                                                                                                                              (PYRO-) PYROSEQUENCING AB.
                                                                                                                                                                                                                                                                                       Dunker J;
                                                                                                                                                                                                                                                                                                                                WPI; 2003-731684/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003064686-A1.
                                                                               WO2003074737-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                     incorporation
                   Synthetic.
Homo sapiens.
                                                                                                                                                                                                                                                                                     Schiller A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-NOV-2003
                                                                                                                        12-SEP-2003
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Matches
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The invention relates to method and kit for demonstrating genetic identity, genetic diversity, genomic variations or polymorphisms, allelic variation and co-dominant scoring within a defined population pool. The method involves detecting the presence or absence of mobile elements (MES) and their respective insertion site junctions across the whole crange of genotypes in a population pool. The invention is useful for distinguishing any organism differing in at least one integration site of cat least one ME integration site in any given genomic position; for genotyphing, phylogenetic studies, parenthood determinations, human complant and animal breeding by demonstrating genetic identity, genetic in plant and animal breeding by demonstrating genetic identity, genetic diversity, genomic variation or polymorphism and particularly co-dominant scoring; and for assured and accelerated breeding. The present sequence is maize hearbreaker (HBr7) gene tight flanking region. This sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Selectin L Lymphocyte Adhesion Molecule 1 (SELL) oligonucleotide #51
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; Selectin L Lymphocyte Adhesion Molecule 1; SELL;
neonatal pertussis; whooping cough; haplotyping; primer;
allele-specific oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 16 BP; 1 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
Example 2; Page 41; 91pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         905 TCATTTTCTTTGGT 918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABK55515 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 rccririccririder 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
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25-OCT-2001.

Kliem SE, Koshy B, Kumar AM; Bieglecki KM, WPI; 2002-292071/33.

Novel genetic variants of selectin L lymphocyte adhesion molecule 1 (SELL) gene useful for therapeutic purposes and for expressing SELL protein useful in identifying drugs to treat whooping cough.

Claim 17; Page 14; 137pp; English

The invention relates to an isolated polynuclectide (I) comprising a nucleotide sequence which is a polymorphic variant of a reference consequence which is a polymorphic variant of a reference sequence for Selectini L Lymphocyte Adhesion Molecule 1 (SELI) gene. SELI polypeptide is useful for screening for drugs targeting the polypeptide. Oligonuclectides derived from (I) are used to target SELI and a haplotype consequence tests and therapeutic treatments for neonatal pertussis (whooping cough).

(I) is useful for studying the expression and function of SELI and expressing SELI protein for use in screening for candidate drugs to treat diseases related to SELI activity. The polymorphism and haplotype data are useful for validating whether SELI is a suitable target for drugs to clinical trials of such drugs. Establishing the SELI haplotype or clinical trials of such drugs. Establishing the SELI haplotype or clinical trials of such drugs. Establishing the SELI haplotype or and reliability of several steps in the discovery and development of drugs for treating diseases associated with SELI activity. The method is also useful to reliability of several steps in the discovery and development of perducted to be associated with SELI activity, e.g. detecting the second of the SELI maplotypes pairs present in individual in screening for compounds targeting SELI to treat a specific condition or disease predicted to be associated with SELI activity, e.g. detecting which of the SELI haplotypes or haplotype pairs present in individual members of a population with the specific disease of interest enables one to screen for compounds that display the highest desired agonist or attrivity for each of the most frequent SELI is useful in the disease population. A polymorphic variant of SELI is useful in the transmit of manales in pertures (expending the effect of the variation on the biological activity of sell performance of the sell and the drugs targeting SELI for the sell and the production of the sell and the development sell an treatment of neonatal pertussis (whooping cough) and in assays to measure the binding affinities of one or more candidate drugs targeting the SELL protein. ABK55465-ABK55559 represent SELL gene allele-specific oligonucleotides of the invention

Sequence 15 BP; 2 A; 2 C; 3 G; 7 T; 0 U; 1 Other;

Gaps ; 0 14.5%; Score 10.6; DB 1; Length 15; 90.9%; Pred. No. 9.1e+02; tive 1; Mismatches 0; Indels Query Match
14.5
Best Local Similarity 90.9
Matches 10; Conservative

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AAS98676 standard; DNA; 15 BP. RESULT 388 AAS98676

AAS98676;

26-MAR-2002 (first entry)

Colony stimulating factor 1 receptor (CSF1R) oligonucleotide #42.

Colony stimulating factor 1 receptor; CSF1R; polymorphic variant, cytostatic; gene therapy; malignant histiccytosis; isogene; myeloid malignancy; inflammatorder; transgenic animal; haplotype; genotype; human; allele specific oligonucleotide; AsO; probe; ss.

Homo sapiens.

WO200179225-A2

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The invertion discipling a polymorphic variant (PV) of a reference sequence which is a polymorphic variant (PV) of a reference sequence for colony stimulating factor 1 receptor (CSF1R) gene, found on The polypeptide are useful for improving the discovery and development of drugs for treating diseases associated with CSF1R activity, e.g., and the haplorypes can be used to validate CSF1R as a candidate target of treating a specific condition or disease predicted to be associated with CSF1R activity. Genotyping the CSF1R gene of an individual can also with CSF1R activity. Genotyping the CSF1R gene of an individual can also useful in studying the expression and function of CSF1R, and in expressing CSF1R protein for use in screening for candidate drugs to the variation on the biological activity of CSF1R. Antibodies are binding affinity of candidate drugs targeting CSF1R. Antibodies are caseful in a variety of diagnostic and prognostic formats and therapeutic methods. A transgenic animal is useful in studying expression of the CSF1R isogenes in vivo, for in vivo screening and testing of drugs care useful as probes and primers, and for assaying a polymorphism in the carget of the prediction of the prediction of the carget region. Without requiring any a priori knowledge of the phenotypic are useful as probes and primers, and for assaying a polymorphism in the carget of the part of a proper of the phenotypic affect of a proper of the part of a proper of the phenotypic affect of a proper of the phenotypic and a proper of the phenotypic affect of a proper of the part of a proper of the phenotypic affect of a proper of the phenotypic affect of a proper of the part of a proper of the phenotypic affect of a proper and proper of the phenotypic affect of a proper of the phenotypic affect of a proper and proper and proper and proper and proper 
                                                                                                                                                                                                                                                                                                                                                                                            Novel polymorphic variants of colony stimulating factor I receptor useful in studying expression and function of the protein, useful for screening candidate drugs to treat diseases e.g. inflammatory disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention describes a novel isolated polynucleotide (I) comprising a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           effect of any particular CSFIR or haplotype the invention provides a method for identifying lead compounds that are more likely to show efficacy in clinical trials. This sequence is an allele specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  oligonuclectide probe used for detecting CSFIR gene polymorphisms, described in the method of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 15; Page 15; 164pp; English.
                                                                                                                                                                                                   (GENA-) GENAISSANCE PHARM INC.
                                                             12-APR-2001; 2001WO-US012044.
                                                                                                                                  12-APR-2000; 2000US-0196411P.
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                                                                                                                                                                                                                                                                    Choi JY,
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14.5%; Score 10.6; DB 1; Length 15; 90.9%; Pred. No. 9.1e+02; ive 1; Mismatches 0; Indels 10; Conservative Local Similarity Query Match Matches

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Gaps

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AAX14698 standard; DNA; 12 BP (first entry) 24-MAR-1999 AAX14698; AAX14698,

Triple helix forming nucleotides 2236-2247 of retinoblastoma gene.

Triple-helix forming region; Triplex formation; DNA detection; identification; bacteria; oncogene; virus; ds.

Homo sapiens

JS5861244-A.

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Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                              Matches
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ABI11454
ID ABI1
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                                                                                                                                                                                                                                                                                                                       The present sequence represents a potential triple-helix forming region. It can be used to demonstrate the assay of the invention. The assay of comprises adding a sample containing double-stranded DNA test sequences, e.g. containing the present sequence, to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (Dy detecting genes for ribosomal RNA) in clinical samples, but also detection of oncogenes and Hepatitis B virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide primer SEQ ID NO 279100 for detecting SNP TSC0006896.
                                                                                                                                                                                                  Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify bacteria.
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Pred. No. 8.6e+02;
0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                             Disclosure, Col 15-16; 168pp; English.
                                                                                                               (PROF-) PROFILE DIAGNOSTIC SCI INC.
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                                              93US-00173489
                                                                               92US-00968436
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Best Local Similarity 91.7%;
Matches 11; Conservative
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                                                                                                                                                Wang C;
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                                              22-DEC-1993;
                                                                                29-OCT-1992;
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                                                                                                                                                Hepburn AG,
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             19-JAN-1999
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC09989, ABF00010-ABE9989, ABF00010-ABE9989, ABF00010-ABE9989, ABF00010-ABE9989, and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but typ.wipo.int/pub/published_pct_sequences
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Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                       Claim 1; SEQ ID NO 279100; 29pp + Sequence Listing; German.
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91.7%; Pred. No. 8.6e+02;
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                                                                                 methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
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945 TGGTTTAATGTA 956

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oligomers are also used for detecting cell type differentiation. ABC000110-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and AB100010-ABH82073 represent the oligomers described in the invention. NoTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretracted genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI00110-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide primer SEQ ID NO 298822 for detecting SNP TSC0018300.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                oet or oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                      Score 10.4; DB 1; Length 12;
Pred. No. 8.6e+02;
0; Mismatches 1; Indels
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                                                                                                                                              Sequence 12 BP; 4 A; 0 C; 2 G; 6 T; 0 U; 0 Other;
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Best Local Similarity
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                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                       Oligonucleotide primer SEQ ID NO 328723 for detecting SNP TSC0034506.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 328723; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Berlin K;
                                                                                    ABI28750 standard; DNA; 12 BP.
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                                                                                                                                                       (first entry)
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methylation status.
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Best Local Similarity
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                                                                    ABI28750/c
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Gaps

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ch 14.2%; Score 10.4; DB 1; Length 12; l Similarity 91.7%; Pred. No. 8.6e+02; 11; Conservative 0; Mismatches 1; Indels

Best Local Similarity

Matches

Homo sapiens

18-OCT-2001

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cycosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but two obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide primer SEQ ID NO 372877 for detecting SNP ISC0059702.
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                                                                                                                                                                                               Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 347494; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             / Match 14.2%; Score 10.4; DB 1; Local Similarity 91.7%; Pred. No. 8.6e+02; Les 11; Conservative 0; Mismatches 1;
                                                                                                           Berlin K;
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                 07-APR-2000; 2000DE-01019173
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                                                                                                           Piepenbrock C,
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                                                                                                              olek A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC090010-ABC99989, ABP00010-ABE99989, ABH00010-ABH99989 and ABI00010-ABE90010 respiratory represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide primer SEQ ID NO 313378 for detecting SNP TSC0025707.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels
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Length 12;

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Homo sapiens

18-OCT-2001

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ABI47521;

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Claim 1; SEQ ID NO 372877; 29pp + Sequence Listing; German.
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                                                                                              Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                   ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                ABH95290 standard; DNA; 12
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF0010-ABF9989, ABF0010-ABF9989, ABF0010-ABF9989, ABF0010-ABF9989 and ABI0010-ABF9989, abfact the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                       14.2%; Score 10.4; DB 1; Length 12; larity 91.7%; Pred. No. 8.6e+02; Conservative 0; Mismatches 1; Indels
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                                               Sequence 12 BP; 0 A; 8 C; 0 G; 4 T; 0 U; 0 Other;
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tes 11; Conserv
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                                                                acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for disponsis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 tepresent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                       invention describes novel oligonucleotide primers or peptide nucleic
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Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABF99999, ABF00010-ABF99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oligonucleotide primer SEQ ID NO 280375 for detecting SNP TSC0008537.
                                                                                                                                  Oligonucleotide primer SEQ ID NO 343915 for detecting SNP TSC0043297
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ABI43942 standard; DNA; 12 BP.
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les 11; Conserv
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Best Local S
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peptide nucl
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This invention describes novel oligonuclectide primers or peptide nucleic acid (RNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretracted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99389, ABF00010-ABF9989, ABH00010-ABH9989 and ABL00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                  Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 307523; 29pp + Sequence Listing; German
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Piepenbrock C,
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14.2%; Score 10.4; DB 1; Length 12; 91.7%; Pred. No. 8.6e+02; ative 0; Mismatches 1; Indels
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Gaps

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ABI61878 standard; DNA; 12 BP. 22-FEB-2002 (first entry)

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide primer SEQ ID NO 361851 for detecting SNP TSC0052889

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Berlin Olek A, Piepenbrock C,

Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine

Claim 1; SEQ ID NO 361851; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The

14.2%; Score 10.4; DB 1; Length 12;

Query Match

Sequence 12 BP; 1 A; 4 C; 0 G; 7 T; 0 U; 0 Other;

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                range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99889, ABF00010-ABF99889, ABH0010-ABF99889 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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14.2%; Score 10.4; DB 1;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1;
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                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                 Oligonucleotide primer SEQ ID NO 292539 for detecting SNP TSC0015253.
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06-APR-2001; 2001WO-IB000713.

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABE99989, ABH00010-ABH9989 and ABL00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                         Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 273101; 29pp + Sequence Listing; German.
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                                                                                                                                                             Berlin K;
                                                                            07-APR-2000; 2000DE-01019173,
                                                                                                                                                           Piepenbrock C,
                                                                                                                    (EPIG-) EPIGENOMICS AG
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14.2%; Score 10.4; DB 1; Length 12; 91.7%; Pred. No. 8.6e+02; Live 0; Mismatches 1; Indels
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 Query Match
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Matches 11; Conservative
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ABI48535 standard; DNA; 12 BP.
               (first entry)
               22-FEB-2002
          ABI48535;
RESULT 407
  AB148535
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single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; ide nucleic acid; cytosine methylation; cardiovascular; primer; ss; ral nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide primer SEQ ID NO 348508 for detecting SNP ISC0045627

Homo sapiens.

WO200177384-A2.

18-OCT-2001

07-APR-2000; 2000DE-01019173

06-APR-2001; 2001WO-IB000713.

(EPIG-) EPIGENOMICS AG

Olek A, Piepenbrock C,

Berlin K; WPI; 2001-657177/75 Set of oligonucleotides, useful for diagnosis and cell typing, is

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABH2073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                 Claim 1; SEQ ID NO 348508; 29pp + Sequence Listing; German.
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ABI62627 standard; DNA; 12 BP (first entry) 22-FEB-2002 ABI62627; RESULT 408 ABI62627

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Gaps

peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; Oligonucleotide primer SEQ ID NO 362600 for detecting SNP TSC0053325.

Homo sapiens

WO200177384-A2

18-OCT-2001.

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Ϋ. Berlin Piepenbrock C, Olek A,

WPI; 2001-657177/75

Ligonuclectides, useful for diagnosis and cell typing, it detect single-nuclectide polymorphisms and cytosine Set of oligonucleotides, methylation status. designed

Claim 1; SEQ ID NO 362600; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABCC0010-ABC39989, ABF00010-ABF99989 and ABI00010-ABF82073

BP.

ABH68840 standard; DNA; 12

12 GGTTTAATATAT

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RESULT 410
ABH68840/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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L Similarity 91.7%; Pred. No. 8.6e+02;
11; Conservative 0; Mismatches 1; Indels
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Best Local Similarity
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989 and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                             Oligonucleotide primer SEQ ID NO 268817 for detecting SNP TSC0001432.
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 ABC99899, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF9001 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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to detect single-nucleotide polymorphisms and cytosine
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Pred. No. 8.6e+02;
0; Mismatches 1; Indels
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91.7%;
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Matches 11, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           methylation status.
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                                                                                                                                     Homo sapiens.
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ABI58887/C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                        Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                    Claim 1; SEQ ID NO 358860; 29pp + Sequence Listing; German.
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                                              Berlin K;
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"...hes 11; Conservative
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                                           Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Piepenbrock C,
             (EPIG-) EPIGENOMICS AG.
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                                                                         WPI; 2001-657177/75
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Sequence 12 BP; 1 A; 6 C; 0 G; 5 T; 0 U; 0 Other;

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99899 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but fire.wipo.int/pub/published_pct_sequences

Sequence 12 BP; 8 A; 3 C; 0 G; 1 T; 0 U; 0 Other;

Gaps ., 0 Query Match
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels

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SULT 414

ABH69400 standard; DNA; 12 H69400

BP.

ABH69400;

22-FEB-2002 (first entry)

Oligonuclectide primer SEQ ID NO 269377 for detecting SNP TSC0001727.

SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001.

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

bet or oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 269377; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and eycosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

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ch 14.2%; Score 10.4; DB 1; Length 12; 1 Similarity 91.7%; Pred. No. 8.6e+02; 11; Conservative 0; Mismatches 1; Indels

Query Match Best Local Similarity

Matches

945 TGGTTTAATGTA 956

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RESULT 416 ABH81639/c

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cycosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 and PSP9989, ABH00010-ABH99989 and ABI00010-ABI22073 represent the oligomers described in the invention. NoTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; 88; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                        Oligonucleotide primer SEQ ID NO 274872 for detecting SNP TSC0003709.
                                     Gaps
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Query Match
14.2%; Score 10.4; DB 1;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1;
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                                                                                                                                                                                                    ABH74885 standard; DNA; 12
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                                                                           931 TCCCTCCTCTTC 942
                                                                                                         1 TCCCTCATCTTC 12
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schultz1-899.rng

WO200177384-A2

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE09989, ABF00010-ABE9989, ABF00010-ABE9989 and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                        Oligonucleotide primer SEQ ID NO 281632 for detecting SNP TSC0009952.
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ABH81639 standard; DNA; 12
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                                                                      22-FEB-2002
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                                     ABH81639
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Matches
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14.2%; Score 10.4; DB 1; 91.7%; Pred. No. 8.6e+02; tive 0; Mismatches 1;
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                                                                                                                                                                             Berlin K;
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                                                                             06-APR-2001; 2001WO-IB000713.
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                                                                                                                                                                             Piepenbrock C,
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                                                                                                                                             (EPIG-) EPIGENOMICS AG
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Best Local Similarity
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designed to detect
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                                                                                                                                                                                                                         This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC09989, ABF00010-ABF99899, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                         Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                         Claim 1; SEQ ID NO 323748; 29pp + Sequence Listing; German.
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WPI; 2001-657177/75
                                                                                                               methylation status.
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central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABF00010-ABF9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fip.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oligonucleotide primer SEQ ID NO 283103 for detecting SNP TSC0011145.
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14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels
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ABH83110 standard; DNA; 12
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                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                              Oligonucleotide primer SEQ ID NO 284306 for detecting SNP TSC0011770.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                        useful for diagnosis and cell
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                                                                               ABH84313 standard; DNA; 12 BP
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nes 11; Conservative
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ABH84313/c
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Matches
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                                                                                                                             peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
Oligonucleotide primer SEQ ID NO 341614 for detecting SNP TSC0042137.
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Best Local Similarity
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                            Claim 1; SEQ ID NO 370306; 29pp + Sequence Listing; German.
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Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels
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WO200177384-A2 Homo sapiens.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting call type differentiation. ABC0910 ABC99189, ABF0010-ABE9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA encoding
                                                                                                                                                                                                                           22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-JAN-2003
                                                                                                                                                              ABH67612;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABX03851;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                     ABH67612/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABX03851
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC09989, ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010-ABF00010
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligonucleotide primer SEQ ID NO 375535 for detecting SNP TSC0061311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                        Length 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 375535; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                    1; Indels
                                                                                            Sequence 12 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
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                                                                                                                                                  Score 10.4; DB 1;
Pred. No. 8.6e+02;
0; Mismatches 1;
was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABI75562 standard; DNA; 12 BP.
                                                                                                                                                     14.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-APR-2001; 2001WO-IB000713.
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                                                                                                                                                                                                                                                                          940 TTCATTGGTTTA 951
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                                                                                                                                                                                                                 11; Conservative
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|TTATTGGTTTA 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-657177/75.
                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
es 11; Conserv
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Query Match Best Loca Matches for

01-AUG-2002

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repeat within a coding sequence (expressed sequence tag, EST), which comprises detecting tandem repeats in a target coding sequence, scoring the repeats for polymorphic probability and generating a dataset correlating the repeats with polymorphic probability to identify a condidate polymorphic repeat. The computational methods (polymorphic marker prediction of ubiquitous simple sequences, POMPOUS, and Rep-X) useful for identifying and detecting candidate polymorphic repeats in human genes, which can be used to understand, treat or eliminate genetic diseases, predispositions or adverse druget reatment reactions. Examples of diseases linked to nucleotide repeats are Machado-Joseph, Haw River syndrome, Huntington's disease, fragile-X syndrome, Fraction's ataxis, myotonic dystrophy, hyperandrogenemia, spinal and bulbar atrophy and spinocerebellar ataxia. The sequences presented in ABX79676-ABX80022 are the polymorphic repeats identified for a search of human ESTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention discloses a method for identifying a candidate polymorphic
                                                                                                                                                                                                                                                                                                                                    Identifying a candidate polymorphic repeat within a coding sequence, funderstanding or treating genetic disease, comprises detecting tandem repeats in a target coding sequence and scoring the repeats for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Target; Human Papilloma Virus; AIDS; triplex; HIV; herpes; hepatitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14.2%; Score 10.4; DB 1; Length 12; 91.7%; Pred. No. 8.6e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 12 BP; 6 A; 0 C; 6 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                             Fondon JW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Purine rich HPV-11 target duplex sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example; Col 1137; 588pp; English.
                                                                                                                                                                                                                                               Minna JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90US-00617907.
91US-00643382.
91US-00683420.
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                                                                                                99US-00475947.
                                                                                                                                              99US-00475947.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               931 TCCCTCCTCTTC 942
                                                                                                                                                                                               (TEXA ) UNIV TEXAS SYSTEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                     polymorphic probability.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12 TICCICCICIIC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
                                                                                                                                                                                                                                               Wren JD,
                                                                                                                                                                                                                                                                                           WPI; 2003-208818/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9209705-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-NOV-1990;
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08-APR-1991;
US6472154-B1
                                                                                              31-DEC-1999;
                                                                                                                                                 31-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-MAR-2003
07-DEC-1992
                                                29-OCT-2002.
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                                                                                                                                                                                                                                               Garner HR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAQ25461;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a differential display comprising contacting cDMA with a first primer that hybridises to an oligonucleic sequence coding for a leucine-rick motif, and with a second oligonucleic sequence coding for a leucine-rick motif, and with a second oligonucleic sequence to form a cDNA-hybrid molecule. The method comprises obtaining mRNA from at least 2 samples, synthesising cDNA from the RNA of each sample, contacting the cDNA with a first primer that hybridises to an oligonucleotide primer of form cDNA-hybrid molecules, amplifying the cDNA-hybrid molecules, detecting amplified products and comparing the amplified products from each sample to identify distinctive amplified products coding for at least one secreted or transmembrane protein. The method is useful for discovering novel secreted and/or transmembrane proteins which are important for cell processes and play an important role in determining its phenotype, and which act as mediators for the transfer of signals from external environment into the cell itself, thus modulating gene expression. Sequences ABX03792-ABX03869 represent DNA encoding secreted protein signal peptide sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Differential display method for identifying secreted or transmembrane protein, comprises contacting a DNA with a first primer that hybridizes to a sequence coding for a leucine-rich motif and with a second
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EST; expressed sequence tag; ss; polymorphic repeat; tandem repeat; polymorphic marker prediction of ubiquitous simple sequences; POMPOUS; Rep-X; human; genetic disease; drug-treatment; Machado-Joseph; Haw River syndrome; Huntington's disease; fragile-X syndrome; Fredreich's ataxis; myotonic dystrophy; hyperandrogenaemia; spinal atrophy; bulbar atrophy; spinocerebellar ataxia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         y match 14.2%; Score 10.4; DB 1; Length 12; Local Similarity 91.7%; Pred. No. 8.68+02; hes 11; Conservative 0; Mismatches 1. --..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 12 BP; 0 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EST polymorphic DNA repeat polynucleotide #286.
                                                                                                                                                                                                                                                                         (UYRA-) UNIV RAMOT APPLIED RES & IND DEV LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Fig 2; 37pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-JAN-2002; 2002WO-IL000071.
                                                                                                                                                                                                                           23-JAN-2001; 2001US-0263158P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    oligonucleotide primer
                                                                                                                                                                                                                                                                                                                                                                       2002-599769/64.
                                                                                                                                                                                                                                                                                                                                                                                              P-PSDB; ABG98380
                                                                            WO200259259-A2.
                                                                                                                                                                                                                                                                                                                         Wreschner DH;
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                         Unidentified
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17-APR-2003

ABX79961;

SULT 429

Query Match Matches

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                                                                                                                                                                                                                                                                    The sequence depicts human Papilloma Virus type-Il beginning at nucleotide 927. The sequence is a viral duplex sequence which contains a purine-rich region concurrated on one chain of the duplex. The sequence may be prepd. by standard DNA synthesis. The HPV duplex sequence is used as a target for novel oligomers which are capable of forming a triplex at physiological ph by coupling into the major groove of the DNA duplex. Two such oligomers HPV202 are capable of forming a triplex at sequence. The oligomers are used in the diagnosis and therapy of HPV infection. Similar oligomers may be used to target viral DNA duplexes specific for HIV, herpes and malignancy. The triple helices form under mild conditions thus assays may be carried out without subjecting the ext specimen to harsh conditions. The oligomer is able to inhibit gene expression, as verified by in vitro systems See also AAQ55452-25501 and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide nucleic acid; PNA; probe; cystic fibrosis; separation; detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fluorodated peptide nucleic acid probe for wild type cystic fibrosis.
                                                                                                                                                                          New oligomers contg. modified bases - which form a triplex with G-C doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02; tive 0; Mismatches 1; Indels
                                                                                                               Matteucci MD, Milligan J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 13 BP; 5 A; 0 C; 8 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag= a
/note= "fluorodated"
                                                                                                                                                                                                          herpes malignancy and inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     b
"amidated"
                                                                                                                                                                                                                                         Claim 11; Page 63; 77pp; English.
91US-00686544.
91US-00686546.
91US-00686547.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP
                                                91US-00766733.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96WO-US015918
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT90162 standard, DNA, 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 91.7
Matches 11; Conservative
                                                                                                              Froehler B, Krawczyk S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag=
                                                                              (GILE-) GILEAD SCI INC
                                                                                                                                             WPI; 1992-217083/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       wild type; F508; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        modified base
 17-APR-1991;
17-APR-1991;
                                 17-APR-1991;
                                              27-SEP-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-OCT-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT90162;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 431
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                                                                                                                     Separation and detection of target sequences in mixed nucleic acid sample solutions - by mixing the sample with a labelled PNA probe which has a sequence complementary to at least a portion of the target sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                        The present sequence is a fluorodated peptide nucleic acid (PNA) probe for the wild type cystic fibrosis allele FSO8, which was used in an example of a novel method for separating single stranded nucleic acids from their complementary strands, and detecting a selected target sequence (STS) in a sample. The method comprises mixing the sample with space for the STS, to form a detectable duplex, separating the species in the sample and detecting the duplex
                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                   Sequence 13 BP; 8 A; 3 C; 1 G; 1 T; 0 U; 0 Other;
                                                   Okeefe H, Yao XW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Berlin K;
              (PERS-) PERSEPTIVE BIOSYSTEMS INC.
                                                                                                                                                                                         Example 7; Page 31; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
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                                                 Fuchs M, Egholm M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-657177/75
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                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
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Page 220

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central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABCC0010-ABC99989, ABF00010-ABE99989 and ABI00010-ABE9973 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                   ftp.wipo.int/pub/published_pct_sequences
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Sequence 13 BP; 8 A; 2'C; 0 G; 3 T; 0 U; 0 Other;

ö Gaps . 0 Match 14.2%; Score 10.4; DB 1; Length 13; Local Similarity 91.7%; Pred. No. 9e+02; es 11; Conservative 0; Mismatches 1; Indels Query Match Best Local 9 Matches

SULT 433

ABC00010 standard; DNA; 13

ВЪ.

ABC00010;

(first entry) 20-FEB-2002

Oligonucleotide SEQ ID NO 1 for detecting SNP TSC000002.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 1; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

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                                                        Gaps
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Query Match
14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels
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951
               1 rrrarregrrra 12
940 TTCATTGGTTTA
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ABF50860/

BP. ABF50860 standard; DNA; 13

ABF50860;

(first entry) 21-FEB-2002 Oligonucleotide SEQ ID NO 150857 for detecting SNP TSC0038073.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

놨 Berlin Piepenbrock C, olek A,

WPI; 2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 150857; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99899, ABH00010-ABH99899 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at

ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Gaps ., 14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02; tive 0; Mismatches 1; Indels 11; Conservative Best Local Similarity Query Match Matches

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RESULT 435

BP. ABH04825 standard; DNA; 13 ABH04825,

ABH04825; EXXXE

22-FEB-2002 (first entry)

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(EPIG-) EPIGENOMICS AG
                                                                WPI; 2001-657177/75.
                                                                             methylation status.
                                                                                                                                      Query Match
Best Local Similarity
Matches 11; Conserv
                           WO200177384-A2
                                                                                                                                                                                                                    WO200177384-A2
                     Homo sapiens,
                                                                                                                                                                                                              Homo sapiens
                                 18-OCT-2001
                                                                                                                                                                                      21-FEB-2002
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                                                           olek A,
                                                                                                                                                                               ABC68408;
                                                                                                                                                                   RESULT 436
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABR00010-ABC9989, ABR00010-ABC9989, ABR00010-ABC9989, abcoming many invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                        set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligonucleotide SEQ ID NO 107407 for detecting SNP TSC0026900.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 68425; 29pp + Sequence Listing; German.
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                                                                                                                                 Berlin K;
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06-APR-2001; 2001WO-IB000713,
                                        07-APR-2000; 2000DE-01019173
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                                                                                  (EPIG-) EPIGENOMICS AG
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                                                                                                                                                                           WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
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                                                                                                                                 Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        olek A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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         Oligonucleotide SEQ ID NO 204802 for detecting SNP TSC0050236.
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                                                                                                                                                                                                                                                                                                                                                                                                                     Berlin K;
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Gaps

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Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

WPI; 2001-657177/75.

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was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

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Claim 1; SEQ ID NO 107407; 29pp + Sequence Listing; German.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABH00010-ABH9989 and ABI00010-ABIS2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 5 G; 2 T; 0 U; 0 Other;

Gaps ; Score 10.4; DB 1; Length 13; Pred. No. 9e+02; 1; Indels 0; Mismatches ch 1 Similarity 91.7%; 11; Conservative Query Match Best Local Matches

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ABF07411 standard; DNA; 13 SCULT 438

BP.

(first entry) 21-FEB-2002 ABF07411;

Oligonucleotide SEQ ID NO 107408 for detecting SNP TSC0026900.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

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06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Berlin Piepenbrock C, olek A,

WPI; 2001-657177/75.

useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status. Set of oligonucleotides,

Claim 1; SEQ ID NO 107408; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation etatus in chemically pretraeted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF9989, ABH00010-ABF9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

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Gaps

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14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02; ive 0; Mismatches 1; Indels

924 CCTTTTATCCCT 935 11; Conservative

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Query Match Best Local Similarity Matches 11; Conserv

CCTTTTACCCCT 12

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                           Sequence 13 BP; 2 A; 5 C; 0 G; 6 T; 0 U; 0 Other;
                                                                           Score 10.4; DB 1;
Pred. No. 9e+02;
0; Mismatches 1;
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(EPIG-) EPIGENOMICS AG
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                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                             Oligonucleotide SEQ ID NO 168452 for detecting SNP TSC0042131.
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                            ABF68455 standard; DNA; 13 BP.
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ABH19299 standard; DNA; 13 BP.
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91.7%;
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central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                      This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABF99999, in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 235522; 29pp + Sequence Listing; German
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Best Local Similarity
Matches 11; Conserv
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

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designed to detect single-nucleotide polymorphisms and cytosine
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Best Local Similarity 91.79
Matches 11, Conservative
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Score 10.4; DB 1; Length 13;
Pred. No. 9e+02;
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larity 91.7%; Pred. No. 9e+02;
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Best Local Similarity 91.7%;
Matches 11; Conservative
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Best Local Similarity
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                               Oligonucleotide SEQ ID NO 158611 for detecting SNP TSC0039924.
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Pred. No. 9e+02;
0; Mismatches 1; Indels
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ABF58614 standard; DNA; 13 BP.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                               Score 10.4; DB 1; Length 13;
Pred. No. 9e+02;
0; Mismatches 1; Indels
                                                                              German.
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                                                                            Claim 1; SEQ ID NO 61511; 29pp + Sequence Listing;
                                                                                                                                                                                                                                                                                                                                                                              Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                   14.2%;
91.7%;
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Best Local Similarity 91.7'
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Set of oligonucleot designed to detect methylation status.
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-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NoTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at flow int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligonucleotide SEQ ID NO 123704 for detecting SNP TSC0030930.
                                                                                                                                                      DB 1; Length 13;
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                                                                                                                                                    14.2%; Score 10.4; DB 1; Length 1
91.7%; Pred. No. 9e+02;
cive 0; Mismatches 1; Indels
                                                                                                                 Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                         ABF23707 standard; DNA; 13 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                             945 TGGTTTAATGTA 956
                                                                                                                                                                     Best Local Similarity 91.7
Matches 11; Conservative
                                                                                                                                                                                                                                                     13 TGGTTTATTGTA 2
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                                                                                                                                                      Query Match
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                 Oligonucleotide SEQ ID NO 219313 for detecting SNP TSC0053330.
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              ABH19336 standard; DNA; 13 BP.
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                                                                                                                                                                                                                      Homo sapiens
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                                               ABH19336;
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14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02;

0; Mismatches

Conservative

Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from NIPO at
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Pred. No. 9e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 158612; 29pp + Sequence Listing; German.
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07-APR-2000; 2000DE-01019173.
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Matches 11, Conservative
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                                                                       (EPIG-) EPIGENOMICS AG
                                                                                                                                           Piepenbrock
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                                                                                                                                                                                                                                                                                                                                                methylation status.
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ABH35606/
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                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 173673; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Berlin K;
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Gaps

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Indels

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13

Sequence 13 BP; 7 A; 1 C; 3 G; 2 T; 0 U; 0 Other;

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adid (PMA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomers are used for disgnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
    invention describes novel oligonucleotide primers or peptide nucleic
This a
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Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;

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Score 10.4; DB 1; Length 13;
Pred. No. 9e+02;
0; Mismatches 1; Indels
                       0;
 14.2%;
                                             942
                      11; Conservative
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                                            931 TCCCTCCTCTTC
           Local Similarity
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Query Match
                      Matches
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Gaps

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ABC43328 standard; DNA; 13
  ABC43328;
PBC43328,
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BP

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 43345 for detecting SNP TSC0012831.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Berlin

Piepenbrock C,

olek A,

WPI; 2001-657177/75

oet or oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 43345; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligoners for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a renge of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligoners are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligoners described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences

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                                                                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                          Gaps
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                                          0;
                                                                                                                                                                                                                                                                                                               Oligonucleotide SEQ ID NO 50248 for detecting SNP TSC0014136.
14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; SEQ ID NO 50248; 29pp + Sequence Listing; German.
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les 11; Conservative
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                                                                                                           12 CTTCATTCGTT
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   Query Match
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Matches
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RESULT 457

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Gaps

0

1; Indels

0; Mismatches

946 GGTTTAATGTAT 957 Local Similarity 91.7 nes 11; Conservative

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GGTTTAATTTAT 1

12

14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02;

Query Match

ABF26824;

F26824

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABP0010-ABF99989, ABH0010-ABB99989 and ABI00010-ABB19989 and ABI00010-ABB19973 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                         Oligonucleotide SEQ ID NO 126821 for detecting SNP TSC0031730.
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Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels
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                       ABF26824 standard; DNA; 13 BP.
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ABF26825;

NABKEKEK

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Gaps

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1; Indels

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Set of oligonuclectides, useful for diagnosis and cell typing, is designed to detect single-nuclectide polymorphisms and cytosine
                                                                                                                                                                                                              Claim 1; SEQ ID NO 219275; 29pp + Sequence Listing; German.
WPI; 2001-657177/75
                                                                                                                                                methylation status.
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a renge of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC090989, ABF00010-ABF99899, ABH00010-ABH9989 and ABI00010-ABIB3073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at . 0 Length 13; 1; Indels Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other; DB 1; Score 10.4; DB 1 Pred. No. 9e+02; 0; Mismatches 14.2%; 91.7%; 948 TITAAIGIAICG 959 11; Conservative Local Similarity Query Match Matches ੋ

TTTAATGTATTG 12 Q

ABF99636 standard; DNA; 13 BP 22-FEB-2002 (first entry) ABF99636; RESULT 460

Oligonucleotide SEQ ID NO 199633 for detecting SNP ISC0049113.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status

Claim 1; SEQ ID NO 199633; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a

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                 central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989 and ABI00010-ABB182073 represent the oligomers described in the invention. NoTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from NIPO at
      gastrointestinal, respiratory,
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                                                                                                                                                                                    Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other,
range of diseases including immune system,
                                                                                                                                             ftp.wipo.int/pub/published_pct_sequences
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide SEQ ID NO 150856 for detecting SNP TSC0038073.

BP.

ABF50859 standard; DNA; 13

RESULT 461

(first entry)

21-FEB-2002

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Gaps

ABF50859;

Homo sapiens,

WO200177384-A2 18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173,

(EPIG-) EPIGENOMICS

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75

oligonucleotides, useful for diagnosis and cell typing, is to detect single-nucleotide polymorphisms and cytosine methylation status, designed Set of

Claim 1; SEQ ID NO 150856; 29pp + Sequence Listing; German.

adid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomuclocides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABP99999, ABH90010-ABP99999 and ABI00010-ABI32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide nolymorphisms (RND) was obtained in electronic format from W. ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 U; 0 Other;

Score 10.4; DB 1; Length 13; Pred. No. 9e+02; 14.2%; 91.7%; Query Match Best Local Similarity

Matches

462

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC09989, ABC0010-ABB9989, ABH0010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                        Oligonucleotide SEQ ID NO 261151 for detecting SNP TSC0063421.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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.larity 91.7%; Pred. No. 9e+02;
Conservative 0; Mismatches 1; Indels
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06-APR-2001; 2001WO-IB000713 07-APR-2000; 2000DE-01019173

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                       Set of oligonuclectides, useful for diagnosis and cell typing, idesigned to detect single-nuclectide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide SEQ ID NO 99612 for detecting SNP TSC0024745.
                                                                                                                                              Claim 1; SEQ ID NO 44672; 29pp + Sequence Listing; German.
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Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABF9989 and ABI00010-ABF92073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                         Claim 1; SEQ ID NO 99612; 29pp + Sequence Listing; German.
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91.7%;
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                                                                                                                                                                                                                                                                                                                                                                                This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretracted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 algomers are also used for detecting cell type differentiation. ABC0010 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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BP.

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ABF41201 standard; DNA;
                                                                                                            ABF41201;
                                       RESULT 468
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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llarity 91.7%; Pred. No. 9e+02;
Conservative 0; Mismatches 1; Indels
                                                                                                            Score 10.4; DB 1; Length 13; Pred. No. 9e+02;
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                                                                          Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
                                                                                                                                               0; Mismatches
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                                                                                                            Query Match
Best Local Similarity 91.7%;
Matches 11; Conservative
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ses 11; Conserv
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                                                                                                                                                                                                                                                                                                                                               ABC36750;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABF99899, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fitte.wipo.int/pub/published_pct_sequences
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                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                Oligonucleotide SEQ ID NO 141198 for detecting SNP TSC0035389.
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Best Local Similarity
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   21-FEB-2002
                                                                                                                                                                                                                                                                              Homo sapiens.
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This invention describes novel oligonucleotide primers or peptide nucleic
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                                                                                                                                                                                                                                                                                                                                                     11; Conservative
                                                                          Set of oligonucleotides,
                                                                                                                                                                                                                                                                                                                                                                                                     TCCCTTCTCTTC 12
                           Piepenbrock C,
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    (EPIG-) EPIGENOMICS AG
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                                                   WPI; 2001-657177/75
                                                                                                  nethylation status.
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peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; ide nucleic acid; cytosine methylation; cardiovascular; primer; ss; ral nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 227913; 29pp + Sequence Listing; German.
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                                                                                                          06-APR-2001; 2001WO-IB000713.
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Les 11; Conservative
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                                     Homo sapiens
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Best Local S:
Matches 11
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligoners for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABH9989, and ABI00010-ABR2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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ligonuclectides, useful for diagnosis and cell typing, it o detect single-nuclectide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                        Claim 1; SEQ ID NO 235584; 29pp + Sequence Listing; German.
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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for disponsis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABH99999 ABH00010-ABH99999 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
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Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;

0 Gaps 0; Score 10.4; DB 1; Length 13; Pred. No. 9e+02; 0; Mismatches 1; Indels ch 14.2%; 1 Similarity 91.7%; 11; Conservative Query Match Best Local Similarity Matches

SULT 472 3H47937

BP. ABH47937 standard; DNA; 13

ABH47937;

(first entry) 22-FEB-2002 Oligonucleotide SEQ ID NO 247914 for detecting SNP TSC0060587.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 247914; 29pp + Sequence Listing; German

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligoners for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, ardiovascular and metabolic disorders. The oligoners are also used for detecting cell type differentiation. ABC00010-ABC99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligoners described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 U; 0 Other;

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 Length 13;
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                            Indels
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                            1;
Score 10.4; DB 1;
Pred. No. 9e+02;
                            0; Mismatches
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91.7%;
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 14.2%;
91.7%;
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                              11; Conservative
                                                                            CCCACCTCTTCA 13
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                Best Local Similarity
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(first entry)

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acid (PNN) Oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989 and ABI00010-ABF32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                               Oligonucleotide SEQ ID NO 34980 for detecting SNP TSC0011109.
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Best Local Similarity 91.7
Matches 11, Conservative
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Berlin K;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF82073 data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                         06-APR-2001; 2001WO-IB000713.
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Best Local Similarity 91./3,
"..hes 11; Conservative
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WO200177384-A2
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Berlin K;

Piepenbrock C,

olek A,

WPI; 2001-657177/75

(EPIG-) EPIGENOMICS AG.

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1; Indels

DB 1; Length 13;

Score 10.4; DB 1 Pred. No. 9e+02; 0; Mismatches

14.2%; 91.7%;

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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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SEQ ID NO 123703; 29pp + Sequence Listing; German. Claim 1; This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligoners for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, ardiovascular and metabolic disorders. The oligoners are also used for detecting cell type differentiation. ABC00010-ABE99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligoners described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

ô Gaps ö Score 10.4; DB 1; Length 13; Pred. No. 9e+02; 1; Indels 0; Mismatches 14.2%; 91.7%; Query Match
Best Local Similarity 91.7
Matches 11; Conservative

SULT 477

ABF40512 standard; DNA; 13

BP.

ABF40512;

(first entry) 21-FEB-2002 Oligonuclectide SEQ ID NO 140509 for detecting SNP TSC0035223.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 140509; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

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oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF0010-ABF9989, ABH0010-ABH99989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; Ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Pred. No. 9e+02;
0; Mismatches 1; Indels
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                                                                                                                          Seguence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PRA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretracted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABR00010-ABB9989, ABH00010-ABB9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                   Oligonucleotide SEQ ID NO 204801 for detecting SNP TSC0050236.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    was obtained in electronic format from WI
ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                ABH04824 standard; DNA; 13 BP.
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943 ATTGGTTTAATG 954
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Best Local Similarity 91.
                     12 ATTTGTTTAATG 1
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                                                                                                                                                   ABH04824;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989, and ABIO0010-ABH302073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                          designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                      Set of oligonucleotides, useful for diagnosis and cell typing,
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Oligonucleotide SEQ ID NO 256075 for detecting SNP TSC0062396.
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ftp.wipo.int/pub/published_pct_sequences
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Best Local Similarity 91.7%;
Marches 11; Conservative
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06-APR-2001; 2001WO-IB000713.

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Claim 1; SEQ ID NO 50247; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                             This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and extrolled status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 74770; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       was obtained in electronic format from Wiftp.wipo.int/pub/published_pct_sequences
                                                                                                                                         Berlin K;
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Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABF99889, ABH00010-ABH99889 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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91.7%;
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Best Local Similarity
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Oligonucleotide SEQ ID NO 136469 for detecting SNP TSC0034103.

(first entry)

21-FEB-2002

ABF36472;

ABF36472 standard; DNA; 13

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                                                                           Gaps
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                                                                                                                                                                                                                                                  Oligonucleotide SEQ ID NO 109632 for detecting SNP TSC0027422.
                                               Score 10.4; DB 1; Length 13;
Pred. No. 9e+02;
0; Mismatches 1; Indels
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                        Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
ftp.wipo.int/pub/published_pct_sequences
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91.7%;
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                                                           Local Similarity 91.7
es 11; Conservative
                                                                                                               Piepenbrock C,
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                                                Query Match
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ABF09635/c
                                                                     Matches
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Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine

methylation status

Berlin K;

Piepenbrock C,

Olek A,

WPI; 2001-657177/75.

(EPIG-) EPIGENOMICS AG.

06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173.

WO200177384-A2 Homo sapiens.

18-OCT-2001.

Claim 1; SEQ ID NO 136469; 29pp + Sequence Listing; German.

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This invention describes novel oligomucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABF99899, ABF00010-ABF99899 and ABI00010-ABF99899 are present the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pot_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                 14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                         Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       946 GGTTTAATGTAT 957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11; Conservative
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Gaps

.; 0

1; Indels

14.2%; Score 10.4; DB 1; Length 13; llarity 91.7%; Pred. No. 9e+02; Conservative 0; Mismatches 1: Indels

Query Match Best Local Similarity Matches 11; Conserv

Pred. No. 9e+02; 0; Mismatches

944 TIGGITIAAIGI 955

5

TTTGTTTAATGT 2

Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

18-OCT-2001

Olek A,

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The
                                                                                                                                                                                                             This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and eyrosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABP00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                             Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02;
                                                                                                                                                                          Claim 1; SEQ ID NO 242332; 29pp + Sequence Listing; German
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Berlin K;
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Piepenbrock C,
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                                          WPI; 2001-657177/75.
                                                                                                                                     methylation status.
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Best Local Similarity
Matches 11; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     invention describes novel oligonucleotide primers or peptide nucleic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 136888; 29pp + Sequence Listing; German
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                                                                                                                                                                                                                                                                                                 Berlin K;
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Query Match

Matches

ABH42355

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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The clifformers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF0010-ABF9989, ABH0010-ABF9989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cantral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABC99989, ABF00010-ABF99989, ABH00010-ABF9989 and ABI00010-ABF32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
  used for diagnosis and/or prognosis of cancer and a
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Best Local Similarity 91.7
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                     931 TCCCTCCTCTTC 942
                                                                                                                                                                                                                                                                                                                                              TCCCTCCCTTC 1
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14.2%; Score 10.4; DB 1; Length 13;

Query Match

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                  1;
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 Pred. No. 9e+02;
                  0; Mismatches
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91.78;
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ABC52085
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and oytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire printed specification, but fire wipo.int/pub/published_pct_sequences
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                                                                                                      Oligonucleotide SEQ ID NO 52102 for detecting SNP TSC0014496.
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designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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Claim 1; SEQ ID NO 9463; 29pp + Sequence Listing; German

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory. Central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989 and ABI00010-ABF82073 data for this patent did not form part of the printed specification, but the wipo int/pub/published_pct_sequence novel oligonucleotide primers or peptide nucleic This invention describes

Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 U; 0 Other;

Gaps ö Score 10.4; DB 1; Length 13; Pred. No. 9e+02; 0; Mismatches 1; Indels 14.2%; 91.7%; Query Match 14.2 Best Local Similarity 91.7 Matches 11; Conservative

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ABC64765 standard; DNA; 13 RESULT 494

ABC64765; ABC64765

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21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 64782 for detecting SNP TSC0017078.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Olek A, Piepenbrock C, WPI; 2001-657177/75.

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Berlin

oligonucleotides, useful for diagnosis and cell typing, is detect single-nucleotide polymorphisms and cytosine methylation status Set of oldesigned

Claim 1; SEQ ID NO 64782; 29pp + Sequence Listing; German.

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genemic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 This invention describes novel oligonucleotide primers or peptide nucleic

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represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; 88; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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91.7%;
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Best Local Similarity 91.78
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13 TTATCCATCCTC 2
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                                                                                                                                                                                                                                              Oligonucleotide SEQ ID NO 64781 for detecting SNP TSC0017078.
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14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels
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                  methylation status.
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      Olek A,
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ABH03631/
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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Pred. No. 9e+02;
0; Mismatches 1; Indels
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                             acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 targement the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                        This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
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Pred. No. 9e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                            German.
                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 150858; 29pp + Sequence Listing;
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                                                                          Berlin K;
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91.7%;
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Matches 11; Conservative
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                                                                        Piepenbrock C,
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                       (EPIG-) EPIGENOMICS AG
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13

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine

methylation status.

Claim 1; SEQ ID NO 203608; 29pp + Sequence Listing; German.

Query Match

Matches

ABF91623

3F91623/c STULT 501

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                     Oligonucleotide SEQ ID NO 256076 for detecting SNP TSC0062396
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ABH56099 standard; DNA; 13
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ATTTTTTTGGT 2
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                                                                                                                                                                                                                                                                                 Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic discorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC09989, ABF00010-ABF09989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels
                                           14.2%; Score 10.4; DB 1; Length 13; larity 91.7%; Pred. No. 9e+02; Conservative 0; Mismatches 1; Indels
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G; 3 T; 0 U; 0 Other,
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    BP; 8
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting angle nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABB9989, ABH00010-ABB13073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                         Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 44120; 29pp + Sequence Listing; German.
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                                                                                          06-APR-2001; 2001WO-IB000713.
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                  WO200177384-A2
                                                        18-OCT-2001
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; 14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02; Pred. No. 9e+02; 0; Mismatches 1; Indels 945 TGGTTTAATGTA 956 Conservative |||||||| rggrtratigta 1 Local Similarity nes 11; Conser Query Match 12 Matches ें O

ABF11630 standard; DNA; 13 BP. (first entry) 21-FEB-2002 ABF11630; ABF11630

Oligonucleotide SEQ ID NO 111627 for detecting SNP TSC0027874.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2.

06-APR-2001; 2001WO-IB000713. 18-OCT-2001

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Berlin K; Olek A, Piepenbrock C,

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABF00010-ABF9989, ABF0010-ABF9989, and ABI0010-ABF90010 are represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from NIPO at set or oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status. ., 14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02; ive 0; Mismatches 1; Indels Claim 1; SEQ ID NO 111627; 29pp + Sequence Listing; German. Sequence 13 BP; 1 A; 1 C; 2 G; 9 T; 0 U; 0 Other; ftp.wipo.int/pub/published_pct_sequences 11; Conservative WPI; 2001-657177/75 Best Local Similarity Query Match Matches

ABF36473 standard; DNA; 13 505 ABF36473/

920 TITGCCTTTTAT 931

TTTGCGTTTTAT 13

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ABF36473;

Oligonucleotide SEQ ID NO 136470 for detecting SNP ISC0034103. (first entry) 21-FEB-2002

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2

06-APR-2001; 2001WO-IB000713. 18-OCT-2001.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C,

Ķ Berlin

WPI; 2001-657177/75.

designed to detect single-nucleotide polymorphisms and cytosine Set of oligonucleotides, useful for diagnosis and cell typing, methylation status.

Claim 1; SEQ ID NO 136470; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory,

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central nervous system, cardiovascular and metabolic disorders. The objormers are also used for detecting cell type differentiation. ABC0010 -ABC99989, ABF00010-ABF9989, ABF00010-ABF9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this partent did not form part of the printed specification, but was obtained in electronic format from WIPO at thitp.bub/published_pct_sequences
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14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99999, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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907 ATTTTCTTTGGT 918
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ch 14.2%; Score 10.4; DB 1; Length 13; I Similarity 91.7%; Pred. No. 9e+02; 11; Conservative 0; Mismatches 1; Indels

Query Match Best Local Similarity Matches 11; Conserv

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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989, ABF00010-ABF99989, ABF00010-ABE99989, ABF00010-ABE99989, ABF00010-ABF99899, ABF00010-ABF99899, ABF00010-ABF99899, ABF00010-ABF99899, ABF00010-ABF99899, ABF00010-ABF99899, ABF00010-ABF99899, ABF00010-ABF99899, ABF00010-ABF9989999999, ABF00010-ABF99989, ABF00010-ABF998999999999, ABF00010-ABF99989, ABF00010-ABF998999999999, ABF00010-ABF99989, ABF00010-ABF9989989, ABF00010-ABF998989, ABF00010-ABF998989, ABF00010-ABF998989, ABF00010-ABF998989, ABF00010-ABF9989989, ABF00010-ABF998989, ABF998989, ABF00010-ABF998989, ABF998989, ABF998989, ABF998989, ABF998989, ABF998989, ABF998989, ABF998989, ABF998989, 
                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                   Oligonucleotide SEQ ID NO 178887 for detecting SNP TSC0044302
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Berlin K;

Piepenbrock C,

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and range of diseases including immune system, gastrointestinal, respiratory, coligomers are also used for detecting cell type differentiation. ABC0010 aABC99989, ABF00010-ABF99989, ABH00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF99989, ABC0010 active the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                      Claim 1; SEQ ID NO 185736; 29pp + Sequence Listing; German.
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06-APR-2001; 2001WO-IB000713.
                             07-APR-2000; 2000DE-01019173
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                                                             (EPIG-) EPIGENOMICS AG
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Gaps

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14.2%; Score 10.4; DB 1; Length 13; larity 91.7%; Pred. No. 9e+02; Conservative 0; Mismatches 1; Indels

|||||||| TGGTTTATTGTA 12

(first entry)

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Claim 1; SEQ ID NO 214908; 29pp + Sequence Listing; German.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Seguence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Gaps ; 0 / match 14.2%; Score 10.4; DB 1; Length 13; Local Similarity 91.7%; Pred. No. 9e+02; les 11; Conservative 0; Mismatches Query Match Best Loca Matches

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SULT 511 3C69764

ABC69764 standard; DNA; 13 BP.

ABC69764;

entry) (first 21-FEB-2002 Oligonucleotide SEQ ID NO 69781 for detecting SNP TSC0018173.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin Piepenbrock C, olek A,

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WPI; 2001-657177/75.

set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

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Claim 1; SEQ ID NO 69781; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE99989, ABF00010-ABE99989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABF9989 and ABI0010-ABF8073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                               Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                    Oligonucleotide SEQ ID NO 5065 for detecting SNP TSC0001763.
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Pred. No. 9e+02;
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                                     ABC05074 standard; DNA; 13 BP.
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illarity 91.7%;
Conservative
                                                                                                   20-FEB-2002 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               methylation status.
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Best Local Similarity
                                                                                                                                                                                                                                                                   WO200177384-A2.
                                                                                                                                                                                                                                    Homo sapiens
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                                                                     ABC05074;
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        RESULT 513
                       BC05074
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à QQ

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 111628; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Berlin K;
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                                                                                                                           Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 36765; 29pp + Sequence Listing; German.
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Berlin K;
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91.7%;
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Piepenbrock C,
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                                                                 WPI; 2001-657177/75
                                                                                                                                                                                                    methylation status.
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Best Local Similarity
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olek A,
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

Claim 1; SEQ ID NO 235521; 29pp + Sequence Listing; German.

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and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF0010-ABF9989, ABH0010-ABF9989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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1.8
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                                                                                                                                                                                                                                                  Length 13;
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Pred. No. 9e+02;
0; Mismatches
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91.7%;
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Best Local Similarity 91.7'
Matches 11, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 517
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Berlin K;

Olek A, Piepenbrock C,

(EPIG-) EPIGENOMICS AG

06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173

WO200177384-A2

18-OCT-2001.

Homo sapiens,

Oligonucleotide SEQ ID NO 140510 for detecting SNP TSC0035223.

(first entry)

21-FEB-2002

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Gaps

ABF40513;

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a renge of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABH9989 and ABI00010-ABI32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss, central nervous system; gastrointestinal; respiratory; immune; metabolic.
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   Score 10.4; DB 1; Length 13;
Pred. No. 9e+02;
0; Mismatches 1; Indels
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14.2%;
91.7%;
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                                                                             11; Conservative
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                                  Best Local Similarity
Matches 11; Conser
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Query Match
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ABC45674/C
TD ABC4567
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ABC45674/C
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ABC4567
DT 21-FEB
DE Oligon
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BOD S
KW SNP, 8
KW SNP, 8
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 +ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                             Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 140510; 29pp + Sequence Listing; German.
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Best Local Similarity 91.74;
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                                                                                                                                                                                                                                                                                                                                                                                                                                methylation status.
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ABF40513 standard; DNA; 13 BP.

RESULT 519 ABF40513/c

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Gaps

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14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02; tive 0; Mismatches 1; Indels

926 TITIAICCTCC 937

TTTTATACCTCC

11; Conservative

Matches

Local Similarity

Query Match

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WPI; 2001-657177/75.
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Best Local Similarity
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8
                                                                                                                                                                                                                                                                                          This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, and http://doi.org/10.0010-ABF9989, and ABI00010-ABF9073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                    Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 223524; 29pp + Sequence Listing; German.
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                                                  06-APR-2001; 2001WO-IB000713.
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                                                                             07-APR-2000; 2000DE-01019173
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                                                                                                                                           Olek A, Piepenbrock C,
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                                                                                                            (EPIG-) EPIGENOMICS
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Best Local Similarity
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                 18-OCT-2001
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BH24394
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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010
                                                                                                                                                                                                                                                       This invention describes novel oligomucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABE99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence date for this pattent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                    Claim 1; SEQ ID NO 224371; 29pp + Sequence Listing; German.
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-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                       Oligonucleotide SEQ ID NO 234451 for detecting SNP TSC0057216.
                                                                                                   Length 13;
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                                                                                                                         1; Indels
                                                                       Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
                                                                                               14.2%; Score 10.4; DB 1; 91.7%; Pred. No. 9e+02;
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                                                                                                                                              946 GGTTTAATGTAT 957
                                                                                                           Local Similarity 91.7
les 11; Conservative
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This invention describes novel oligomucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                Oligonucleotide SEQ ID NO 214907 for detecting SNP TSC0052298.
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              ABH14930 standard; DNA; 13
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14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02; Live 0; Mismatches 1; Indels

Homo

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claim 1; SEQ ID NO 69782; 29pp + Sequence Listing; German.
07-APR-2000; 2000DE-01019173.
                                                                      Piepenbrock C,
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                                      (EPIG-) EPIGENOMICS AG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclecide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels
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BC43329

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                    Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ch 14.2%; Score 10.4; DB 1; Length 13; 1 Similarity 91.7%; Pred. No. 9e+02; 11; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 43346; 29pp + Sequence Listing; German.
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Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF0010-ABF99989, ABH0010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

14.2%; Score 10.4; DB 1; Length 13; larity 91.7%; Pred. No. 9e+02; Conservative 0; Mismatches 1; Indels 943 ATTGGTTTAATG 954 13 ATTTGTTTAATG 2 Query Match Best Local Similarity Matches 11; Conser

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Gaps

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RESULT 528 ABC99594

ABC99594 standard; DNA; 13 ABC99594;

BP.

21-FEB-2002

Oligonucleotide SEQ ID NO 99611 for detecting SNP TSC0024745.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

Olek A, Piepenbrock C,

Berlin K;

useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status. Set of oligonucleotides, WPI; 2001-657177/75

Claim 1; SEQ ID NO 99611; 29pp + Sequence Listing; German.

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomerlectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE09999, ABF0010-ABE99999, ABF0010-ABE99999, ABF0010-ABE99999 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences This invention describes novel oligonucleotide primers or peptide nucleic

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                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Score 10.4; DB 1; Length 13;
Pred. No. 9e+02;
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Pred. No. 9e+02;
0; Mismatches 1; Indels
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14.28;
                Best Local Similarity 91.7%;
Matches 11; Conservative
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Query Match
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GTTTTAATGTAT 12

946 GGTTTAATGTAT 957

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11; Conservative

Matches

Local Similarity

Query Match

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Gaps

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RESULT 530

ABF40514;

F40514

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC09989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF99999 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but typ.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                       Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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Homo sapiens.
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                                                                                                                                                                                                                                                                         olek A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABH00010-ABH9989 and ABI00010-ABH2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                            Oligonucleotide SEQ ID NO 140511 for detecting SNP TSC0035223.
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                            ABF40514 standard; DNA; 13
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Best Local Similarity 91.7'
Matches 11; Conservative
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This invention describes novel oligonuclectide primers or peptide nucleic acid (RNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH9998 and ABI000110-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but frp.wipo.int/pub/published_pct_sequences
                                                                                                         Set of oligonucleotides, useful for diagnosis and cell typing, adesigned to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 150859; 29pp + Sequence Listing; German.
                                                                                              of oligonucleotides,
WPI; 2001-657177/75
                                                                                                                                                                                                        methylation status.
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DB 1; Length 13; 1; Indels Sequence 13 BP; 5 A; 1 C; 6 G; 1 T; 0 U; 0 Other; Score 10.4; DB 1 Pred. No. 9e+02;); Mismatches ; 0 14.2%; 928 TIAICCTCCTC 939 11; Conservative ||||||| TTATCGTCCTC 2 Local Similarity 13 Query Match Matches ਨੇ Q D

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Oligonucleotide SEQ ID NO 227914 for detecting SNP TSC0055573. ABH27937 standard; DNA; 13 BP. 22-FEB-2002 (first entry) ABH27937;

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Piepenbrock C, Olek A,

WPI; 2001-657177/75.

Berlin K;

set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABH99899 and ABIO0010-ABIB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from NIPO at

Claim 1; SEQ ID NO 178888; 29pp + Sequence Listing; German.

Score 10.4; DB 1; Length 13; Pred. No. 9e+02;

14.2%; 91.7%;

Query Match Best Local Similarity

Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;

ftp.wipo.int/pub/published_pct_sequences

Claim 1; SEQ ID NO 227914; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a

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central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 -ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABF2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide SEQ ID NO 178888 for detecting SNP TSC0044302.
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                                                                                                                  Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 U; 0 Other;
range of diseases including immune system,
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and excessine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABF99989, ABH00010-ABH9989, and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                    Oligonucleotide SEQ ID NO 238165 for detecting SNP
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91.7%;
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                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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18-OCT-2001.

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Query Match

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Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
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PART O X PAR
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
                                                  Claim 1; SEQ ID NO 19759; 29pp + Sequence Listing; German.
     methylation status.
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                   06-APR-2001; 2001WO-IB000713.
                                                                   07-APR-2000; 2000DE-01019173.
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                     14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02;
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Query Match
Best Local Similarity 91...
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ó acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 expressent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formet from WIPO at This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC09989, ABF00010-ABF09989, ABR00010-ABF9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Gaps i, Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine . 0 Oligonucleotide SEQ ID NO 45692 for detecting SNP TSC0013289. 14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02; ive 0; Mismatches 1; Indels Claim 1; SEQ ID NO 45692; 29pp + Sequence Listing; German. Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other; ftp.wipo.int/pub/published_pct_sequences Berlin K; ABC45675 standard; DNA; 13 BP. 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173. Query Match
Best Local Similarity 91.77;
Conservative 940 TICALIGGILLA 951 1 TraArrGGTTTA 12 methylation status.

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ABC34962 standard; DNA; 13
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                                                                      Sequence 13 BP; 3 A; 4 C; 0 G; 6 T; 0 U; 0 Other;
data for this patent did not form part of the pass obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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Best Local Similarity
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                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                      Oligonucleotide SEQ ID NO 34979 for detecting SNP TSC0011109.
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acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The coligomuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory contral nervous system, cardiovascular and metabolic disorders. The contral nervous system, cardiovascular and metabolic disorders. The ABC99989, ABF00010-ABF99899, BHN0010-ABH9989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cycosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABIO0010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the content of the printed specification, but
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                                                                WPI; 2001-657177/75
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This invention describes novel oligonuclectide primers or peptide nucleic

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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The cligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABH00010-ABH99989 and ABI00010-ABH32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide SEQ ID NO 195987 for detecting SNP TSC0048213. (first entry) 22-FEB-2002 ABF95990;

ABF95990 standard; DNA; 13 BP.

3F95990/c

07-APR-2000; 2000DE-01019173. 06-APR-2001; 2001WO-IB000713 WO200177384-A2 Homo sapiens. 18-OCT-2001

Berlin K; Piepenbrock C, olek A,

EPIGENOMICS AG

(EPIG-)

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 195987; 29pp + Sequence Listing; German

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, coingomers are also used for advectular and metabolic disorders. The cligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 terpresent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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   Length 13;
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Score 10.4; DB 1;
Pred. No. 9e+02;
                                   0; Mismatches
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ID ABF95994 standard; DNA; 13 BP.
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14.2%;
Best Local Similarity 91.7%;
Matches 11; Conservative C
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WO200177384-A2

Berlin K;

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ABF95994;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, oligomers are also used for detecting cell type differentiation. ABC0010 +ABC9989, ABF0010-ABF9989, ABF9010-ABF9989, ABF9010-ABF998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        oet or oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Pred. No. 9e+02;
0; Mismatches 1; Indels
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91.7%;
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                           Oligonucleotide SEQ ID NO 173674 for detecting SNP TSC0043251.
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                                                         ABF73677 standard; DNA; 13 BP.
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                                                                                                       (first entry)
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                                                                               ABF73677;
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                                  RESULT 549
                                              ABF73677
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

Oligonucleotide SEQ ID NO 223523 for detecting SNP TSC0010846.

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ABH23546 standard; DNA; 13

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cccrcgrcrrca 1

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22-FEB-2002 (first entry)

ABH23546;

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14.2%; Score 10.4; DB 1; Length 13; 91.7%; Pred. No. 9e+02; ive 0; Mismatches 1; Indels

940 TICATIGGITIA 951 11; Conservative

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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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German. Claim 1; SEQ ID NO 173674; 29pp + Sequence Listing; This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF09989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;

Gaps 0 Score 10.4; DB 1; Length 13; Pred. No. 9e+02; 0; Mismatches 1; Indels 14.2%; Query Match 14.2 Best Local Similarity 91.7 Matches 11; Conservative

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SSULT 550

ABH00190 standard; DNA; 13 BP. 3H00190

ABH00190;

(first entry) 22-FEB-2002

Oligonucleotide SEQ ID NO 200167 for detecting SNP TSC0049250.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

꿏 Olek A, Piepenbrock C,

WPI; 2001-657177/75.

useful for diagnosis and cell typing, i Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.

Claim 1; SEQ ID NO 200167; 29pp + Sequence Listing; German.

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

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oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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Pred. No. 9e+02;
0; Mismatches 1;
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14.2%;
Best Local Similarity 91.7%;
Matches 11; Conservative (
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABP00010-ABP99999, ABP00010-ABP99999, ABF00010-ABF99999, ABF99999, ABF00010-ABF999999, ABF00010-ABF999999, ABF00010-ABF999999, ABF00010-ABF999999, ABF00010-ABF999999, ABF00010-ABF999999, ABF00010-ABF999999, ABF00010-ABF999999, ABF00010-ABF999999, ABF999999, ABF00010-ABF9999999, ABF00010-ABF9999999, ABF00010-ABF9999999, ABF999999, ABF00010-ABF9999999, ABF9999999, ABF9999999, ABF9999999, ABF99999999, ABF
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TATCACTACCAA 13
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polyworphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 5066 for detecting SNP TSC0001763.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABH99999 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                   This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and excessine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABE99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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designed to detect single-nucleotide polymorphisms and cytosine
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Claim 1; SEQ ID NO 195992; 29pp + Sequence Listing; German.
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91.7%;
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                                                                                                                                    Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (EPIG-) EPIGENOMICS AG
                                                                                    (EPIG-) EPIGENOMICS AG
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                                                                                                                                                                               WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 11; Conserv
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WO200177384-A2. Homo sapiens

18-OCT-2001

olek A,

22-FEB-2002

ABF95995;

555 BF95995 ESULT

RESULT 558

ABH42354

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention describes novel oligonucleotide primers or peptide nucleic
                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                      ·
0
                                                                                                                                                                                                                                      Oligonuclectide SEQ ID NO 155249 for detecting SNP TSC0039210.
                                                 Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 155249; 29pp + Sequence Listing; German.
                                             Score 10.4; DB 1; Length 1
Pred. No. 9e+02;
0; Mismatches 1; Indels
                       Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;
ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                              Berlin K;
                                            14.2%;
91.7%;
                                                                                                                                                                                                                                                                                                                                                                           06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                07-APR-2000; 2000DE-01019173
                                                                                                                                                                    ABF55252 standard; DNA; 13
                                                                                                                                                                                                                 21-FEB-2002 (first entry)
                                                                                          948 TTTAATGTATCG 959
                                                       Local Similarity 91.7
                                                                                                              TTTAATGTATAG 12
                                                                                                                                                                                                                                                                                                                                                                                                                                            Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                      (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                             WO200177384-A2.
                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                    18-OCT-2001
                                                                                                                                                                                           ABF55252;
                                               Query Match
                                                                                                                                              RESULT 557
                                                                                                                                                          ABF55252
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABF9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   typing,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
                                                                                              Oligonucleotide SEQ ID NO 242331 for detecting SNP TSC0059098.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oligonucleotide SEQ ID NO 250125 for detecting SNP TSC0061075.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 242331; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                  Berlin K;
 BP.
                                                                                                                                                                                                                                                                                               06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABH50148 standard; DNA; 13 BP
                                                                                                                                                                                                                                                                                                                                07-APR-2000; 2000DE-01019173.
ABH42354 standard; DNA; 13
                                                               (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 945 TGGTTTAATGTA 956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTTTTAATGTA 12
                                                                                                                                                                                                                                                                                                                                                                                              Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                             (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               methylation status.
                                                                                                                                                                                                                              WO200177384-A2
                                                                                                                                                                                                 Homo sapiens.
                                                               22-FEB-2002
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                               ABH42354;
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Gaps

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/ Match 14.2%; Score 10.4; DB 1; Length 13; Local Similarity 91.7%; Pred. No. 9e+02; les 11; Conservative 0; Mismatches 1; Indels

Query Match

Matches

946 GGTTTAATGTAT 957

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1 GGTTTAATGTTT 12

olek A,

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The sequences given in AAQ35691-703 were used in the construction of NYAC recombinants expressing the bovine herpesvirus type 1 BHV1 genes.

NYAC recombinants expressing the bovine herpesvirus type 1 BHV1 genes.

NYAC is a Copenhagen vaccine strain of vaccinia virus which has been modified by deletion of six non-essential regions of the genome encoding known or potential virulence factoris. The deletion loci were engineered as recipient loci for the insertion of foreign genes. The BHV1 gIV was conned into the vaccinia virus flanking arms and the Pi promoter was cloned upstream of the gIV gene. The gI gene was cloned and placed in operative conjunction with the H6 promoter. The NYVAC tramsformant containing the gIV and gI genes were used to produce gIV and gI-specific containing the gIV and gI genes were used to produce gIV and gI-specific under the control of the I31 promoter. GIII-specific antibodies were also produced after expression of the gene in transformed vero cells. Further CNYVAC recombinants could be produced containing the BHV1 gIII and gIV genes. See also AAQ35501-864. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                               Vaccine comprises recombinant, attenuated pox-virus - use for vaccinating against viral infections such as rabies, hepatitis B, HIV, HSV, EBV, CMV,
                                                                                                      Cox WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                  Taylor J, Tartaglia J, Norton EK;
Limbach KJ, Johnson GP, Pincus SE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 4 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (UYNY ) UNIV NEW YORK MT SINAI SCHOOL MEDICINE.
                                                                                                                                                                                                                                                                                                    Disclosure; Page 194; 456pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WZ7; oligo; hybrid arrest assay; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence of oligo corresp. to WZ7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
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92US-00847951.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAQ54837 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                945 TGGTTTAATGTA 956
                                            (VIRO-) VIROGENETICS CORP
                                                                                    Perkus ME,
De Taisne C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                   Gettig RR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
                                                                                                                                                                         WPI; 1992-331718/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
les 11; Conserv
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21-JUN-1993;
    06-MAR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-2003
19-JUL-1994
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                                                                                       Paoletti E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sealfon SC;
                                                                                                           Riviere M,
Francis J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ54837,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               acid (PNA) oligomers invert origonarciae primers of percent macrical acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NYVAC; recombinant; bovine herpesvirus; type 1; BHV1; vaccinia virus; Copenhagen vaccine; virulence factors; deletion loci; recipient loci; gIV; flanking arms; Pi promoter; gI; H6 promoter; gIII; I3L promoter; monoclonal antibodies; Vero cells; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                     set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match 14.2%; Score 10.4; DB 1; Length 13; Local Similarity 91.7%; Pred. No. 9e+02; les 11; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 250125; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cloning site production oligo IBRL3.
                                                                                                                                                                                                                                                                                      Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ35696 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         91US-00666056.
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                                                                                                                                                                                                  07-APR-2000; 2000DE-01019173
                                                                                                                                                              06-APR-2001; 2001WO-IB000713
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(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 941 TCATTGGTTTAA 952
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                                                                                                                                                                                                                                                                                         Piepenbrock C,
                                                                                                                                                                                                                                                 (EPIG-) EPIGENOMICS
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                                                                         WO200177384-A2.
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                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-MAR-2003
24-FEB-1993
                                                                                                                 18-OCT-2001
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Query Match

Matches

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Synthetic.

AAQ35696;

ESULT 560

AQ35696

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The example describes the cloning of a cDNA representing the mouse gonadotrophin-releasing hormone receptor (GrRH-R) and confirming its identity using Xenopus occyte expression. Subclones for hybrid arrest screening were isolated using PCR with a variety of degenerate oligos corresp. to conserved transmembrane domains of the GPR superfamily. The oligos used to isolate the gp. of subclones including WZ7, modified from sequences of published oligos, corresp. to transmembrane III (AAQ54834) and transmembrane VI (AAQ54835). PCR was performed, and a portion restriction digested, subcloned and sequenced. For hybrid-arrest assay, an antisense oligo corresp. to transmembrane II of the 5HTIO receptor, and an oligos corresp. to WZ7 were synthesised. (Updated on 25-MAR-2003 to
                              Gonadotropin-releasing hormone receptor genes and proteins - for expression of GnRH and screening and identifying GnRH (ant)agonists, for diagnosis and therapy of reproductive disorders and for contraception.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; INF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mouse IL-5 hammerhead ribozyme target sequence (nt. position 839).
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                                                                                                                                                                                                                                                                                                                                                                                              Score 10.4; DB 1; Length 15;
Pred. No. 9.8e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 5 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                Example; Page 29; 73pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                 0:
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940S-0022795
940S-0022483
940S-00228041
940S-00245736
940S-00245736
940S-00241280
940S-0029133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAT54622 standard; RNA; 15 BP
                                                                                                                                                                                                                                                                                                                                                                                            14.2%;
91.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                               11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15 CCTCCTCATCAT 4
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WPI; 1994-026225/03.
                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                             correct PN field.)
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22-APR-1997
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16-AUG-1994;
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04-APR-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-APR-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-APR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-JUL-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT54622;
                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-5) mRNA at the nucleotide base position indicated in the DB line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and haltpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes and preventing the recruitment and activation of ecasinophils. The ribozymes can also be used to treat ecsinophilia (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated consimphilia—myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
                                                                                                                                                                                                                                                                                                           DDT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Karpelsky A, Kisich K, Marulic-Adamic J, Mcswiggen JA; Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD; Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                          Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mouse IL-5 hammerhead ribozyme target sequence (nt. position 840)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ó,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14.2%; Score 10.4; DB 1; Length 15; 41.7%; Pred. No. 9.8e+02; tive 6; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 2 A; 5 C; 2 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 2; Page 221; 407pp; English.
          9405-00293520.
9405-00300000.
9405-00311486.
9405-0031149.
9405-0031437.
9405-0031877.
9405-0031842.
9405-00321993.
9405-0033768.
9405-0033768.
                                                                                                                                                                                                                                               95US-00380734.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT54624 standard; RNA; 15 BP.
                                                                                                                                                                                                                              94US-00363233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 41.73,
Fina 5; Conservative
                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        935 TCCTCTTCATTG 946
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uccucuuceuug 13
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                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1995-351090/45
                                          08-SEP-1994;
23-SEP-1994;
23-SEP-1994;
28-SEP-1994;
03-OCT-1994;
             19-AUG-1994;
02-SEP-1994;
                                                                                                                           07-OCT-1994;
                                                                                                                                                             04-NOV-1994;
                                                                                                                                                                                                              16-DEC-1994;
                                                                                                                                                                                             28-NOV-1994;
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22-APR-1997
                                                                                                                                                                                                                                                                                                            Stinchcomb
                                                                                                                                                                                                                                                                                                                             Grimm S,
                                                                                                                                                                                                                                                                                                                                             Modak A,
Tracz D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT54624;
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Sequence 15 BP; 1 A; 5 C; 2 G; 0 T; 7 U; 0 Other;

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Philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; heumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
translocation; chronic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease;
                                                                                                                                                                                          94US-00228041.
94US-00245736.
94US-00291932.
94US-00291433.
94US-0029520.
94US-00390000.
94US-0031039.
94US-00311749.
94US-00311749.
94US-00311749.
94US-00311937.
94US-00311937.
                                                                                                                                                                                                                                                                                                                                                  94US-00345516.
94US-00357577.
94US-00363233.
                                                                                                                                                       94US-00218934.
94US-00222795.
94US-00224483.
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                                                                                                                              95WO-IB000156
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19-AUG-1994;
02-SEP-1994;
08-SEP-1994;
23-SEP-1994;
23-SEP-1994;
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07-OCT-1994;
11-OCT-1994;
04-NOV-1994;
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23-DEC-1994;
30-JAN-1995;
                                                                                                                                                                        07-APR-1994;
15-APR-1994;
15-APR-1994;
18-MAY-1994;
06-JUL-1994;
                                                                         Mus musculus.
                                                                                          WO9523225-A2
                                                                                                                                                                                                                                                                                              SEP-1994;
                                                                                                                                                                                                                                                                                                                                          10-NOV-1994;
                                                                                                                               23-FEB-1995;
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                                                                                                            31-AUG-1995
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(RIBO-) RIBOZYME PHARM INC.

Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA; Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD; Tracz D, Usman N, Wincott FE, Woolf T;

WPI; 1995-351090/45.

Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.

Claim 2; Page 221; 407pp; English.

The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 [III-8] mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the II-5 target sequences and thereby inhibit II-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of II-5 in lymphocytes and preventing the recruitment and activation of eosinophils. The ribozymes can also be used to treat eosinophila (related to parasitic infection or with pulmonary infiltration) and L-trypcophan-associated eosinophilia-myalgia syndrome. (Updated on 25-WAR-2003 to correct PI field.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT33371-T33431 are antisense oligonucleotides used to inhibit the expression of human vascular endothelial growth factor (VEGF). The synthetic oligonucleotides contain phosphorothioate linkages and essentially consist of 2.0-alkylated ribonucleotides. Inhibiting the expression of VEGF is useful in the treatment of hypoxia induced neovascularisation and angiogenesis associated disease states, retinopathy of prematurity, diabetic retinopathy and age related macular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human vascular endothelial growth factor anti:sense oligo:nucleotide -inhibits the expression of VEGF, useful in treatment of hypoxia induced neovascularisation and angiogenesis associated disease states.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                            Gaps
                                                                                                                                                                                                                                                                         neovascularisation; angiogenesis; metaštasis; retinopathy; macular; degeneration; expression inhibitor; ss
                                                                                                                                                                                                                                 Human vascular endothelial growth factor antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                            0;
                                                                                                                                                                                                                                                              Antisense; VEGF; vascular endothelial growth factor; hypoxia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14.2%; Score 10.4; DB 1; Length 15; 91.7%; Pred. No. 9.8e+02; ive 0; Mismatches 1; Indels
Length 15;
                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15 BP; 0 A; 7 C; 1 G; 7 T; 0 U; 0 Other;
  DB 1;
  Score 10.4; DB 1;
Pred. No. 9.8e+02;
                            Mismatches
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                              . 9
                                                                                                                                                      BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                 95US-00398945.
95US-00569926.
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  14.2%;
larity 41.7%;
Conservative
                                                                                                                                                      AAT33389 standard; cDNA; 15
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                                                                                                                                                                                                           (first entry)
                                                         935 TCCTCTTCATTG 946
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (HYBR-) HYBRIDON INC.
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Best Local Similarity
            Local Similarity
nes 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           degeneration
                                                                                                                                                                                                                                                                                                                                                  WO9627006-A2
                                                                                                                                                                                                                                                                                                                                                                                                         29-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                   02-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                08-DEC-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Robinson GS;
                                                                                                                                                                                                           16-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                              06-SEP-1996
                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAT48404;
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     Query Match
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AAT48404
ID AAT4840
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AC AAT4840
                     Best Loca
Matches
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Stinchcomb D,
      (MOUN ) MOUNT SINAI SCHOOL MEDICINE.
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                                                                                                      Example 6; Page 43; 76pp; English.
                                                                                                                                                                                                                                                                                                                                             AAX75708 standard; RNA; 15 BP.
                                                                                                                                                                                                                                     14.2%;
91.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96WO-US017480.
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                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                         933 CCTCCTCTTCAT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 foetal liver kinase 1; ss
                                                                                                                                                                                                                                                        11; Conservative
                                                                                                                                                                                                                                                                                             CCTCCTCATCAT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen J,
                                            WPI; 1996-393334/39.
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Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CHIR ) CHIRON CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1997-259017/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                     28-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9715662-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-JAN-1996;
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                                                                                                                                                                                                                                                                                             15
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                        Sealfon
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                                                                                                                                                                                                                                                                                                                           RESULT 567
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                                                                                                                                                                                                                                                                                                               growth
                                                                                                                                                                                                                                                                                                         Neovascularisation can be reduced by blocking vascular endothelial growth factor (VEGF) expression using a synthetic oligonucleotide specific for VEGF. Inhibiting neovascularisation is useful for treatment of retinopathy of prematurity, diabetic retinopathy and age-related macular degeneration. The present sequence is an example of a suitable oligonucleotide specific for human VEGF
                                                                                                                                                                                                                                                        Inhibiting neovascularisation using VEGF-specific oligo:nucleotide(s) for treatment of retinopathies and age-related macular degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gonadotropin-releasing hormone receptor; GnRH-R; G-protein receptor; signal transduction; reproduction; contraception; diagnosis; therapy; polymerase chain reaction; PCR; primer; antisense; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                              Vascular endothelial growth factor, inhibition, decrease, antisense, neovascularisation, retinopathy, age-related macular degeneration;
                                                                                                                                                                                                                                                                                                                                                                                                                         ٥;
                                                                                                                                                                                                                                                                                                                                                                                                  Score 10.4; DB 1; Length 15;
Pred. No. 9.8e+02;
); Mismatches 1; Indels
                          Oligonucleotide H-9A specific for human VEGF nucleic acid.
                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 0 A; 7 C; 1 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GnRH receptor clone WZ7 antisense oligonucleotide.
                                                                                                                                                                                                                                                                                       Disclosure; Page 12; 66pp; English
                                                                                                                                                                                    (HYBR-) HYBRIDON INC.
(CHIL-) CHILDRENS MEDICAL CENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                 96WO-US001189
                                                                                                                                                                    95US-00378860
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91.7%;
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Best Local Similarity 91.79,
Local 11, Conservative
          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT37305 standard; DNA; 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                    Smith LEH;
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                                                                                                                                                                                                                                       WPI; 1996-362689/36
                                                                                                                                                                                                                   GS,
                                                                  diabetes; ss
                                                                                                          WO9623065-A2
                                                                                                                                                26-JAN-1996;
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          11-MAR-1997
                                                                                                                             01-AUG-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9625423-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-JAN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-1996
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                                                                                     Synthetic.
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                                                                                                                                                                                                                  Robinson
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
Identifying modulators of gonadotropin-releasing hormone receptor -
including new anti-sense oligo:nucleotide(s) and antibodies, useful e.g.
for contraception or diagnosis and treatment of reproductive disorders.
                                                                                                                                                                                                                                                                                               AAT37302-03), derived from mouse gonadctrope alpha-T3-1 cells. In a hybrid-arrest assay, the WZ7 antisense oligo was co-injected with alpha-T3-1 and rat brain RNA into Xenopus occytes. It completely abolished expression of the gonadctropin- releasing hormone receptor (GRRH-R) in the occytes but did not affect expression of the brain 5HTIC receptor. WZ7 was used as a probe to isolate a cDNA clone (AAT37306) coding for murine GRRH-R (AAW03995)
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                                                                                                                                                                                                                                                            antisense oligonucleotide (AAT37305) is based on clone WZ7 (see also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 10.4; DB 1; Length 15;
Pred. No. 9.8e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human flt-1 and KDR hammerhead ribozyme target site #42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 5 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
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synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient freely referably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatroid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67175 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                   y match
Local Similarity 41.7%; Pred. No. 9.8e+02;
les 5; Conservative 6; Mismatches 1. Thanh
                                                                                                                                                                                                                                                                                                                                  BP; 2 A; 5 C; 1 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               922 TGCCTTTTATCC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 UUCCUUUUAUCC 14
                                                                                                                                                                                                                                                                                                                                            Sequence 15
                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loca
Matches
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Asthma, airway epithelium, adenosine free, cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; ss. Human endothelin-1 antisense oligonucleotide. AAT76412 standard; DNA; 15 BP. 95US-00474497. 96WO-US009306 (UYEC-) UNIV EAST CAROLINA. (first entry) Metzger WJ; WO9640162-A1. 06-JUN-1996; 07-JUN-1995; 19-DEC-1996 15-SEP-1997 Synthetic. Nyce JW, AAT76412 3SULT 568 AT76412

Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of WPI; 1997-051871/05. subject

claim 5; Page 38; 71pp; English.

A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide specific for the human endothelin-1. The method can be used to treat airway diseases, bronchitis and other airway diseases, bronchitis and other airway diseases, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyperreactive airways

```
Length 15;
Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;
                                   Score 10.4; DB 1;
Pred. No. 9.8e+02;
0; Mismatches 1;
                                     cuery Match
Best Local Similarity 91.7%;
Matches 11; Conservative (
```

```
928
           12
917 GICTITGCCTTT
            GTCTTTTCCTTT
 8
            셤
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acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                     Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis;
                                                                     Human endothelin-1 antisense oligonucleotide fragment.
                 BP.
                                                                                                                                                                                                                                                  98WO-US019419.
                                                                                                                                                                                                                                                                     97US-0059160P.
98US-00093972.
                 AAX54195 standard; DNA; 15
                                                    (first entry)
                                                                                                                                                                          prostate cancer; ss.
                                                                                                                                                                                                                WO9913886-A1.
                                                                                                                                                                                                                                                    17-SEP-1998;
                                                                                                                                                                                                                                                                      17-SEP-1997;
                                                                                                                                                                                                                                                                                09-JUN-1998;
                                                    05-JUL-1999
                                                                                                                                                                                                                                 25-MAR-1999.
                                                                                                                                                                                              Synthetic.
                                   AAX54195;
         AAX54195
RESULT
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Nyce JW;

WPI; 1999-229400/19.

(UYEC-) UNIV EAST CAROLINA.

New antisense oligonucleotides used in treatment of, e.g. pulmonary vasoconstriction

Disclosure; Page 57; 120pp; English.

The specification describes antisense oligonucleotides (AAX52869-X55271)

directed against at least 2 mRNAs selected from target genes, coding and

directed against at least 2 mRNAs selected from target genes, coding and

codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'

codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'

codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'

codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'

conditions or mixtures. The antisease oligonucleotides may be derived

from sequences AAX55272-74. These multiple target oligonucleotides

conditions or mixtures. The antisease and conditions are those

diseases and conditions. Typical diseases and conditions are those

associated with impaired respiration and inflammation, including lung

cassociated with impaired respiration and inflammation, including lung

diseases, pulmonary vasconstriction, inflammation, respiratory

caute asthma, allergies, asthma, impeded respiratory, respiratory

distress syndrome, pain, cystic fibrosis, pulmonary hypertension,

cdistress syndrome, pain, cystic fibrosis, pulmonary hypertension,

cdisease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.

colon cancer, breast cancer, lung cancer, melanoma, happentic metastases, as hepatocellular carcinoma, kidney cancer, mēlanoma, hepatic metastases, a well as all types of cancers which may metastasize or have metastasized to the lungs, including breast and prostate cancer

Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

DB 1; Length 15; 14.2%; Score 10.4;

Query Match

·:

Gaps

·.

i; Indels

Gaps . 0 Pred. No. 9.8e+02; 0; Mismatches 1; Indels 91.7%; 11; Conservative Best Local Similarity Matches

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AAX54205 standard; DNA; 15 BP. AAX54205;

(first entry) 05-JUL-1999

Human endothelin-1 antisense oligonucleotide fragment.

impaired respiration; inflammation; lung disease;
pulmonary vasoconstriction; inflammation; allergic rhinitis;
pulmonary vasoconstriction; inflammation; allergic rhinitis;
acute asthma; allergy; asthma; impeded respiration;
respiratory distress syndrome; pain; cystic fibrosis;
pulmonary hypertension; pulmonary vasoconstriction; emphysema;
chronic obstructive pulmonary disease; leukenha; lymphoma; carcinoma;
colon cancer; breast cancer; lung cancer; pancreatic cancer;
hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis; Antisense oligonucleotide; multiple target; antisense treatment; prostate cancer; ss

WO9913886-A1

25-MAR-1999

98WO-US019419. 17-SEP-1998;

97US-0059160P. 98US-00093972 09-JUN-1998; 17-SEP-1997;

(UYEC-) UNIV EAST CAROLINA

Nyce JW;

WPI; 1999-229400/19.

antisense oligonucleotides used in treatment of, e.g. pulmonary vasoconstriction.

Disclosure; Page 58; 120pp; English.

The specification describes antisense oligonucleotides (AAX52869-X55271)
directed against at least 2 mRNAs selected from target genes, coding and
non-coding regions of RNAs corresponding to target genes, gene initiation
codons, genomic flanking regions, intron-exon borders, the 3'-end, the 3'end and the juxta-section between coding and non-coding regions and all
segments of RNAs encoding proteins associated with one or more diseases,
conditions or mixtures. The antisense oligonucleotides may be derived
from sequences AAX5572-74. These multiple target oligonucleotides
conditions or mixtures. The multiple target oligonucleotides
from sequences AAX55180-271) can be used for the antisense treatment of
diseases and conditions. Typical diseases and conditions are those
associated with impaired respiration and inflammation, allergic rhinitis,
casced with impaired respiration and inflammation, allergic rhinitis,
diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
clisters syndrome, pain, cystic fibrosis, pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
diseases (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
colon cancer, breast cancer, lung cancer, pancreatic cancer,
colon cancer, breast cancer, lung cancer, pancreatic cancer,
colon cancer, breast cancer, lung cancer, melanoma, hepatic metastasized
to the lungs, including breast and prostate cancer AAX54205

AAX6405

AAX54205

AAX5420

Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

ö Gaps .. Length 15; Indels .. ;; Score 10.4; DB 1; Pred. No. 9.8e+02; 0; Mismatches 1; Query Match
Best Local Similarity 91.7
Matches 11, Conservative 928 1 Greffrectrr 12 917 GTCTTTGCCTTT 셤 ð

RESULT 571

BP. AAA33639 standard; DNA; 15 AAA33639 ID AAA3

AAA33639;

(first entry) 28-JUL-2000

Low adenosine antisense oligonucleotide SEQ ID NO:1328.

Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergy; disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

Homo sapiens.

WO200009525-A2.

24-FEB-2000,

99WO-US017712. 03-AUG-1999;

98US-0095212P. 03-AUG-1998;

(UYEC-) UNIV EAST CAROLINA.

Nyce JW;

WPI; 2000-205971/18.

New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or cancers.

Claim 18; Page 430; 1343pp; English.

oligonucleotide (ON) with low adenosine (up to 154), which targets mucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, and/or attiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive culmonary hypertension, emphysema, chronic obstructive culmonary disease (COPD), and cancers such as leukaemias, lymphomas, breast and prostate cancer. The reduction of the adenosine content of the CONs reduces side effects. The A-containing ons break down with the release of deoxyadenosine which activates adenosine receptors causing celease of deoxyadenosine which activates adenosine receptors causing analyses. The present invention describes a new composition comprising an antisense nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to

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AAA33992) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence
                                                                                              up with
listing
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Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;
```

ö Gaps 0 Score 10.4; DB 1; Length 15; Pred. No. 9.8e+02; Indels 0; Mismatches 14.2%; 91.7%; Query Match
Best Local Similarity 91.7
Matches 11; Conservative

SULT 572

BP. AAA33649 standard; DNA; 15

AAA33649;

(first entry) 28-JUL-2000 Low adenosine antisense oligonucleotide SEQ ID NO:1338.

antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic conddition; pulmonary vasoconstriction; asthma: respiratory distress syndrome; pain; cystic fibrosis; emphysem; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss. pulmonary

Homo sapiens.

WO200009525-A2

24-FEB-2000

99WO-US017712. 03-AUG-1999; 98US-0095212P 03-AUG-1998;

(UYEC-) UNIV EAST CAROLINA.

Nyce JW;

WPI; 2000-205971/18.

antisense oligonucleotides useful for treating e.g. pulmonary oconstruction, inflammation, allergies, asthma, hypertension, vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or

Claim 18; Page 432; 1343pp; English.

oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, altergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiaschmatic, cytostatic and analgesic activities. The compositions useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, altergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastassise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ons reduces side effects. The A-containing ONs break down with the present invention describes a new composition comprising an antisense

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0
             bronchoconstriction and inflammation. AAA12313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to AAA3392) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence
release of deoxyadenosine which activates adenosine receptors causing
                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                                         Length 15;
                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                               Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                             Score 10.4; DB 1;
Pred. No. 9.8e+02;
0; Mismatches 1
                                                                                                                                                                                                                                                                               14.2%;
                                                                                                                                                                                                                                                                                                                                                                928
                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 91.7
Matches 11, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                        1 GICTTITICATT 12
                                                                                                                                                                                                                                                                                                                                                                  917 GTCTTTGCCTTT
                                                                                                                                                                                                listing
        888888888888888
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Substrate for hammerhead ribozyme which cleaves HCV RNA at nt. BP. AAZ64176 standard; RNA; 15 28-MAR-2000 (first entry) AAZ64176; AAZ64176

RESULT 573

Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage; cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer; autoimmune disease; ss.

Hepatitis C virus.

W09955847-A2

04-NOV-1999.

99WO-US009027. 26-APR-1999;

98US-0083217P. 98US-0100842P. 99US-00257608. 99US-00274553. 27-APR-1998; 18-SEP-1998; 25-FEB-1999; 23-MAR-1999;

(RIBO-) RIBOZYME PHARM INC.

Macejak Pavco PA, Roberts E, Blatt L, Mcswiggen JA,

WPI; 2000-062023/05.

treatment of diseases and conditions related to Novel ribozymes for the hepatitis C infection.

Claim 1; Page 83; 123pp; English.

enzymatic nucleic acid, especially a hammethead ribozyme, which cleaves the Hepatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was soremed for optimal ribozyme target sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with Hepaticellular carcinoma. The ribozymes may be used in combination with The present sequence represents the preferred target sequence of an

schultz1-899.rng

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treat HCV infection, other infectious diseases, autoimmune
interferon to treat F
diseases, and cancer
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Score 10.4; DB 1; Length 15; Pred. No. 9.8e+02; 4; Mismatches 1; Indels Sequence 15 BP; 3 A; 6 C; 1 G; 0 T; 5 U; 0 Other; 14.2%; 58.3%; CCCTCCTCTTCA 943 7; Conservative CCCUCCUGUUCA 15 Query Match Best Local Similarity 932 Matches ੋ q

ó;

Gaps

;

1; Indels

AAF19761 standard; DNA; 15 RESULT 574 AF19763

AAF19761;

14-MAR-2001 (first entry)

BP.

Human endothelin-1 polynucleotide fragment #1328.

Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction, impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis; cancer; ss.

Homo sapiens.

WO200062736-A2.

26-OCT-2000,

24-MAR-2000; 2000WO-US008020.

99US-0127958P 06-APR-1999;

(UYEC-) UNIV EAST CAROLINA. J. W. NYCE (NYCE/)

Nyce JW;

WPI; 2000-679539/66.

Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions.

Claim 14; Page 241; 1592pp; English.

oligonucleotides and compositions [I] comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antinflammatory, analgesic, immunosuppressive, antisthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with lung/respiratory disorders and malignancies, such as stimulating and activating peptiade factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, and peripheral molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system peptide present invention describes low adenosine (A) content antisense

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transmitters, defensins, growth factors, vasoactive peptides and receptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary hypertension, emptysema, chronic obstructive pulmonary disease (COPD), pulmonary transplantation rejection, pulmonary infections, bronchitis, and/or cancer. AAF18434 to AAF21543 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                     the present invention
            8888888888888888
```

Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Gaps .. Length 15; 1; Indels 14.2%; Score 10.4; DB 1; 91.7%; Pred. No. 9.8e+02; ive 0; Mismatches 1; 11; Conservative Local Similarity Query Match Matches

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8 g RESULT 575 **AAF197**

AAF19771 standard; DNA; 15 BP.

AAF19771;

(first entry) 14-MAR-2001

Human endothelin-1 polynucleotide fragment #1338.

respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary obstruction; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis; cancer; ss. human, airway disorder, bronchoconstriction, lung inflammation, surfactant depletion, respiratory, bronchodilator, antiinflammatory, immunosuppressive, antiasthmatic, analgesic, hypotensive; cytostatic; Low adenosine antisense oligonucleotide; phosphorothioate; allergy;

Homo sapiens.

WO200062736-A2.

26-OCT-2000.

24-MAR-2000; 2000WO-US008020.

99US-0127958P.

06-APR-1999;

(UYEC-) UNIV EAST CAROLINA. (NYCE/) NYCE J W.

Nyce JW;

WPI; 2000-679539/66.

Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions.

Claim 14; Page 242; 1592pp; English.

The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base.

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(I) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with lung/respiratory disorders and malignancies, such as stimulating and activating peptide factors and transmitters, cranscription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system peptide transmitters, defensins, growth factors, vasocative peptides and receptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides man malignancy associated proteins. The antisense oligonucleotides man way be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, inflammation, allergic espain, cystic fibrosis (CP), allergic rhinitis (AR), pulmonary hypertension, emphysema, chronic obstructive will man polymucleotide and or sociated in the exemplification of the process.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the present invention
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Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Gaps . 0 Score 10.4; DB 1; Length 15; Pred. No. 9.8e+02; 0; Mismatches 1; Indels 14.2%; Query Match
Best Local Similarity 91.7
Matches 11, Conservative

AAF48460 standard; DNA; 15 BP. 3SULT 576 4F48460/c

30-MAR-2001 (first entry) AAF48460;

IGFBP3 oligonucleotide #1880.

Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological; cardiant; virucide, ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding proctein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis, kidney disease; neovascular condition of the retina; ss.

Homo sapiens

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693

99US-0140345P. 21-JUN-1999; (MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Wraight CJ, Werther GA,

WPI; 2001-041421/05. KOKEKKKKKKKKK

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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                 skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see APR45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina,
                                                                                                                                                             The present invention relates to a method for ameliorating the effects of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14.2%; Score 10.4; DB 1; Length 15; 91.7%; Pred. No. 9.8e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 6 A; 2 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                      Example 7; Page 56; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            919 CTTTGCCTTTTA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12 CTTTGCCTTTAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
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AAF49429 standard; DNA; 15 BP. (first entry) 30-MAR-2001 AAF49429; AAF49429 RESULT

IGF-I oligonucleotide #389.

Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic; dermatological; cardiant; virucide, ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; 1GF-1; pityriasis; 1GF binding protein; 1GFBP-2; 1GFBP3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatoosis, neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis, kidney disease; neoblasis, condition; hyperplasis, kidney disease;

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

99US-0140345P. 21-JUN-1999; (MURD-) MURDOCH CHILDRENS RES INST.

SR; Edmondson Werther GA, G, Wraight

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

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Example 8; Page 63; 201pp; English
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for ameliorating the effects of neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Inaulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, inchtyvasis, pityriasis, ruba, pilaris, serbourhoea, keloids, keratosis, nonly asias brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

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Score 10.4; DB 1; Length 15;
Pred. No. 9.8e+02;
0; Mismatches 1; Indels
                           1; Indels
                           .
14.2%;
91.7%;
                                                  899 CCCTGGTCATTT 910
                          11; Conservative
                                                                          4 cccredrarci 15
              Similarity
  Query Match
               Local
                          Matches
                                                    ें
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; 0

Gaps

; 0

AAF48457 standard; DNA; 15 BP. AAF48457;

30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1877.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFB-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693

99US-0140345P. 21-JUN-1999;

Werther GA, Edmondson SR; (MURD-) MURDOCH CHILDRENS RES INST. Wraight CJ,

WPI; 2001-041421/05

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

Example 7; Page 56; 201pp; English.

inflammation.

Edmondson SR;

Wraight CJ, Werther GA,

WPI; 2001-041421/05

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation,

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 56; 201pp; English.

The present invention relates to a method for ameliorating the effects of

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skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor. IGF binding protein [IGFBF]-2 or IGFBF], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the ARFSISI-FASIGI. The method is useful for amplorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a neovascular condition such as a neovascular condition brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant; virucide, ophthalmological; keloid, skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFB-2, IGFBP3, inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea, ruba; keratosis; neoplasia; sclaroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis; kidney disease; neobascular condition of the retina; sa
                                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                         14.2%; Score 10.4; DB 1; Length 15; 91.7%; Pred. No. 9.8e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                     Sequence 15 BP; 6 A; 2 C; 3 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                      vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF48458 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IGFBP3 oligonucleotide #1878.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                               919 CTTTGCCTTTTA 930
                                                                                                                                                                                                                                                                                                                                            Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                 15 CTTTGCCTTTAA 4
                                                                                                                                                                                                                                                                                                                             Local Similarity
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                                                                                                                                                                                                                                                                                                         Query Match
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AAF48458/0
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inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAP45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           vessels or any other hyperplasia
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Sequence 15 BP; 6 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

ö Gaps , ch 14.2%; Score 10.4; DB 1; Length 15; 1 Similarity 91.7%; Pred. No. 9.8e+02; 11; Conservative 0; Mismatches 1; Indels Query Match Best Local Similarity Matches

580 STOLT

AAF49434 standard; DNA; 15 1F49434

BP.

(first entry) 30-MAR-2001

IGF-I oligonucleotide #394

Antisense therapy; antiproliferative; antinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; plaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neobarchoea; the retina; ss.

Homo sapiens.

WO200078341-A1

28-DEC-2000

21-JUN-2000; 2000WO-AU000693

99US-0140345P. 21-JUN-1999; (MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR, Werther GA, Wraight CJ,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 63; 201pp; English.

ō skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGP]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-P45161). The method is useful for ameliorating the effects of psoriasis, present invention relates to a method for ameliorating the effects

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB9]-2 or IGFB9], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, inchtyorisis, ruba, pilaris, senbornhoea, keloids, keratosis, neoplasis, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic
ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                           6
                                                                                                                                                                                    Length 15;
                                                                                                                                                                                                                           1; Indels
                                                                                                                                            Sequence 15 BP; 2 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                               Score 10.4; DB 1;
Pred. No. 9.8e+02;
0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                          vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                           BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IGFBP3 oligonucleotide #1879.
                                                                                                                                                                                  / Match
Local Similarity 91.7%;
nes 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                           AAF48459 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                     CIGGICATITIC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wraight CJ, Werther GA,
                                                                                                                                                                                                                                                                                                         credrearcare 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF48459;
                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                          Query Match
                                                                                                                                                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                      RESULT 581
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Nucleic acid hybridization assay by adding target, probe and intercalating agent to hybridization medium, irradiating test sample formed, detecting radiation intensity, determining mismatch between probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention relates to an assay which involves adding a target nucleic acid sequence, a probe complementary or imperfectly complementary to the target sequence, and an intercalating agent to a hybridisation medium to form a test sample. The probe or intercalating agent contains a fluorophore, the test sample is irradiated, and the intensity of the fluorescent radiation emitted is detected. The extent of mismatch between the probe and the target sequence is determined. The assay method is useful for sequencing or assaying nucleic acid hybridization complexes. The assay is also useful for identifying accessible regions in folded nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sequences, to determine the number of mismatched pairs in a hybridization complex, and to map genomes. Other uses include the quantification of binding affinity between the probe and target sequence, which is useful for designing antisense drugs with optimized binding characteristics. The present sequence represents a mutated fragment of exon 10 of the human cystic fibrosis gene which is used as the target sequence in an example
                                                                                                                                                                                                                                                                                                                                                                                                            mismatch detection; binding affinity; cystic fibrosis; exon 10;
                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                               Human cystic fibrosis gene exon 10 mutant target sequence SEQ ID 9.
disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                         0;
                                                                                      Length 15;
                                                                                                                         Indels
                                                Sequence 15 BP; 6 A; 2 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                  Score 10.4; DB 1;
Pred. No. 9.8e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Erikson GH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 3; Page 18; 56pp; English.
                                                                                                                                                                                                                                                                           AAH45603 standard; DNA; 15 BP.
                                                                                    14.2%;
91.7%;
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                                                                                                                                                      919 CTTTGCCTTTTA 930
                                                                                                                                                                                                                                                                                                                                           19-SEP-2001 (first entry)
                                                                                                                      Conservative
                                                                                                                                                                                          CTTTGCCTTTAA 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (INGE-) INGENEUS CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-418088/44.
                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                   mutant; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200146467-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                  11;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and target.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                      13
                                                                                                                                                                                                                                                                                                           AAH45603;
                                                                                                                                                                                                                                                                                                                                                                                                                   Assay;
                                                                                                                                                                                                                                                                                                                                                                                                                                   numan;
                                                                                                                    Matches
                                                                                                                                                                                                                                          RESULT 582
AAH45603
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The invention relates to genotyping human galanin receptor (GALRI) gene of an individual, involving determining for the two copies of the GALRI Copen present in the individual, the identity of the nucleotide pair at one or more polymorphic sites. The method is useful for determining whether an individual has a haplotype or haplotype pairs defined in the specification. This is useful for improving the efficacy and reliability of several steeps in the discovery and development of drugs for treating diseases associated with GALRI activity, e.g., infectious diarrhoea and creating a specific condition or disease predicted to be associated with GALRI activity, and in the design of clinical trials of candidate drugs of treating a specific condition or disease predicted to be associated with GALRI activity. The method is useful to screen for compounds with GALRI to treat a specific conditions or disease associated with GALRI activity. A GALRI polymucleotide or variant is useful in studying the expression and function of GALRI, and in expressing GALRI protein for use in screening for candidate drugs to treat diseases related to GALRI activity. The polymucleotide or variant is useful for studying expression of the GALRI protein, and for studying the effect of the activity of candidate drugs to treat diseases related to GALRI activity of candidate drugs termined of the candidate drugs termined or studying the effect of the affinity of candidate drugs termined and for studying the effect of the affinity of candidate drugs termined and for the candidate drugs termined and growth hormone insulficiency. Ass98408 the effectious diarrhoea and growth hormone insulficiency. Ass98408
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Genotyping human galanin receptor gene of an individual for determining haplotype of an individual, involves determining the identity of nucleotide pair at specific polymorphic sites for two copies of the gene.
    Gaps
                                                                                                                                                                                                                                                                                                                                                          Galanin receptor; GALR1; human; single nucleotide polymorphism; SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 represent human GALR1 gene allele-specific oligonucleotides used to detect GALR1 gene polymorphisms as described in the method of the
                                                                                                                                                                                                                                                                                                                         Galanin receptor gene GALR1 allele-specific oligonucleotide #69
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                                                                                                                                                                                                                                                                                                                                                                                       drug discovery, haplotyping; infectious diarrhoea;
growth hormone deficiency; allele-specific oligonucleotide; ss.
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  Indels
  1;
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Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Choi JY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 16; Page 15; 99pp; English
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                                                                                                                                                                                  AAS98357 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-APR-2001; 2001WO-US012306.
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                                                                                                                                                                                                                                                                            (first entry)
                                          918
11; Conservative
                                                                3 ATCTTCTTTGGT 14
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                                      907 ATTTTCTTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-066341/09.
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                                                                                                                                                                                                                                                                              12-MAR-2002
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                                                                                                                                                                                                                                    AAS98357;
Matches
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DB 1; Length 15;

Score 10.4;

14.2%;

Query Match

Score 10.4; DB 1; Length 15; Pred. No. 9.8e+02;

14.2%; 91.7%;

Best Local Similarity

Query Match

Sequence 15 BP; 2 A; 2 C; 3 G; 8 T; 0 U; 0 Other;

illustrating the assay of the invention

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;
              Gaps
              ;
0
              Indels
Pred. No. 9.8e+02;
    78.6%; Pred. ...
              11; Conservative
       Best Local Similarity
              Matches
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584

AAL38353 standard; DNA; 15 BP.

AAL38353;

(first entry) 15-AUG-2002

ASO primer for detecting SCYA7 gene polymorphism SEQ ID 15.

Small inducible cytokine A7; SCYA7; polymorphic variant; haplotyping; inflammatory disorder; cancer; haplotype; single nucleotide polymorphism; genotype; human; ASO; PCR; primer; 88.

Homo sapiens.

WO200226771-A2

04-APR-2002

01-OCT-2001; 2001WO-US030880

29-SEP-2000; 2000US-0236989P.

(GENA-) GENAISSANCE PHARM INC.

B Koshy Choi JY, Chew A,

WPI; 2002-426009/45.

Novel small inducible cytokine A7 gene useful for therapeutic purposes, for studying the expression and function of the polynucleotide, and for expressing the cytokine protein.

Claim 14; Page 12; 54pp; English.

The invention relates to an isolated small inducible cytokine A7 (SCYA7) polymucleotide comprising a nucleotide sequence which is a polymorphic variant of a reference for the SCYA7 cont of its fragment. The polymorphic variant SCYA7 gene is useful in screening for drugs targeting, which comprises contacting the SCYA7 gene with a candidate agent and assaying for binding activity. The SCYA7 gene and a recombinant nonhuman organism are useful in studying the expression and function of SCYA7, and in expressing SCYA7 protein for use in screening for candidate drugs to treat diseases related to SCYA7 activity such as inflammatory disorders, and cancer. Haplotyping the SCYA7 gene of an individual and identifying the association between a trait and at least one haplotype/haplotype pair are useful in developing diagnostic tests and therapeutic treatments for diseases associated with SCYA7 activity. Haplotyping the SCYA7 gene of an individual is also useful in the design of clinical trials of candidate drugs for treating specific conditions or diseases associated with SCYA7 activity. Genotyping the SCYA7 gene of an individual lis also useful in the design of clinical individual is useful in determining whether an individual has one of the haplotypes or one of the haplotype pairs. An isolated oligonucleotide useful in genotyping the SCYA7 gene are useful in genotyping and/or haplotyping the SCYA7 gene are useful in genotyping and/or haplotyping the SCYA7 gene in an individual. This polymucleotide sequence represents an ASO primer used for detecting polymorphisms in the SCYA7 gene of the invention

Sequence 15 BP; 1 A; 2 C; 3 G; 8 T; 0 U; 1 Other;

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                              Gaps
                              .
0
14.2%; Score 10.4; DB 1; Length 15; 78.6%; Pred. No. 9.8e+02; tive 1; Mismatches 2; Indels
                                 11; Conservative
                 Local Similarity
    Query Match
                                 Matches
                    Best
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935 TCCTCTTCATTGGT 948 || || || || || || || || TCTTCTTGATTGST 15 N

ð 엄

AAS98789, RESULT

BP AAS98789 standard; DNA; 15

AAS98789;

(first entry) 26-MAR-2002 Colony stimulating factor 1 receptor (CSF1R) oligonucleotide #155.

Colony stimulating factor 1 receptor; CSF1R; polymorphic variant; cytostatic; gene therapy; malignant histiocytosis; isogene; myeloid malignancy; inflammatory disorder; transgenic animal; haplotype; genotype; human; allele specific oligonucleotide; ASO; primer; ss.

Homo sapiens.

WO200179225-A2.

25-OCT-2001.

12-APR-2001; 2001WO-US012044.

12-APR-2000; 2000US-0196411P.

(GENA-) GENAISSANCE PHARM INC.

Koshy Choi JY, Chew A,

WPI; 2002-075058/10.

Novel polymorphic variants of colony stimulating factor 1 receptor useful in studying expression and function of the protein, useful for screening candidate drugs to treat diseases e.g. inflammatory disorders.

Claim 15; Page 17; 164pp; English.

The invention describes a novel isolated polynucleotide (I) comprising a sequence which is a polymorphic variant (VV) of a reference sequence for colony stimulating factor I receptor (CSFIR) gene, found on The colony stimulating diseases associated with CSFIR activity, e.g., colony stimulating diseases associated with CSFIR activity, e.g., malignant histiocycosis, myeloid malignancies, and inflammatory discorders and the haplotypes can be used to validate CSFIR as a candidate target for treating a specific condition or disease predicted to be associated with CSFIR activity. Genotyping the CSFIR gene of an individual can also be used in developing the CSFIR gene of an individual can also useful in studying the expression and function of CSFIR, and in expressing CSFIR protein for use in screening for candidate drugs to treat diseases related to CSFIR activity and in studying the effect of the variation on the biological activity of CSFIR, and in sudding affinity of candidate drugs targeting CSFIR. Antibodies are binding affinity of candidate drugs targeting CSFIR. Antibodies are consected against CSFIR protein, and for studying expression of the compounds. Allele specific oligonucleotides (ASO) are useful as probes and ormpounds. Allele specific oligonucleotides (ASO) are useful as probes and primers, and for assaying a polymorphism in the target region. Without requiring any a priori knowledge of the phenotypic effect of any particular CSFIR or haplotype the invention provides a coligonucleotide primers, and for assaying a polymorphism in the activity of coligonucleotide primers used for detecting CSFIR gene polymorphisms, coligonucleotide primer used for detecting CSFIR gene polymorphisms, and the merching or the paper of the phenotypic of the paper of the phenotypic coligonucleotide primers used for detecting CSFIR gene polymorphisms, the method of the phenotypic coligonucleotide primers and particular cSFIR protein. described in the method of the invention

Sequence 15 BP; 7 A; 3 C; 4 G; 0 T; 0 U; 1 Other;

Query Match

Score 10.4; DB 1; Length 15; 14.2%;

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Gaps

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Colony stimulating factor 1 receptor; CSF1R; polymorphic variant; cytostatic; gene therapy; malignant histiocytosis; isogene; myeloid malignancy; inflammatory disorder; transgenic animal; haplotype; genotype; human; allele specific oligonucleotide; ASO; probe; ss.
                                                                                                                     Colony stimulating factor 1 receptor (CSF1R) oligonucleotide #18.
         Indels
 9.8e+02;
ches 2;
 Pred. No. 9.8e
1; Mismatches
                                                                          BP.
                                                                                                                                                                                                                                                  (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                                                                                     12-APR-2001; 2001WO-US012044.
                                                                                                                                                                                                                                   12-APR-2000; 2000US-0196411P.
.68;
                        914
                                                                         AAS98652 standard; DNA; 15
                                                                                                      26-MAR-2002 (first entry)
                                     15 cycccrrrrrrrr
        11; Conservative
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                      901 CIGGICATITICIT
                                                                                                                                                                                                                                                                                WPI; 2002-075058/10.
Best Local Similarity
                                                                                                                                                                                        WO200179225-A2
                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                      25-0CT-2001
                                                                                        AAS98652;
                                                                                                                                                                                                                                                                 Chew A,
       Matches
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The invention describes a novel isolated polymucleotide (I) comprising a sequence which is a polymorphic variant (PV) of a reference sequence for colony stimulating factor I receptor (CSFIR) gene, found on The polypeptide are useful for improving the discovery and development of drugs for treating diseases associated with CSFIR activity, e.g., malignant histocytosis, myeloid malignancies, and inflammatory disorders and the haplotypes can be used to validate CSFIR as a candidate target for treating a specific condition or disease predicted to be associated with CSFIR activity. Genotyping the CSFIR gene of an individual can also be used in developing diagnostic tests and therapeutic treatments. (I) is useful in studying the expression and function of CSFIR, and in expressing CSFIR protein for use in screening for candidate drugs to treat diseases related to CSFIR activity and in studying the effect of the variation on the biological activity of CSFIR, whilbodies are useful in a variety of diagnostic and prognostic formats and therapeutic useful in a variety of diagnostic and prognostic formats and therapeutic useful in a variety of diagnostic and prognostic formats and therapeutic CSFIR isogenes in vivo, for in vivo screening and testing of farugs targeted against CSFIR protein, and for testing the efficacy of therapeutic agents and compounds. Allele specific oligonucleotides (ASO) are useful as probes and primers, and for assaying a polymorphism in the target region. Without requiring any a priori knowledge of the phenotypic effect of any particular CSFIR or haplotype the invention provides a method for identifying lead compounds that are more likely to show eliforacy in clinical trials. This sequence is an allele specific oligonucleotide probe used for detecting CSFIR gene polymorphisms, Novel polymorphic variants of colony stimulating factor 1 receptor useful in studying expression and function of the protein, useful for screening candidate drugs to treat diseases e.g. inflammatory disorders. Claim 15; Page 15; 164pp; English

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The invention relates to methods for haplotyping human paraoxonase 1

(PON1) gene. It also relates to the single nucleotide polymorphisms (SNP)

To MON-1 gene. Polymorphic variants of the PON1 gene are useful in studying the expression and function of PON1, and in expressing PON1

Studying the expression and function of PON1, and in expressing PON1

proteins for use in screening candidate drugs to treat diseases

associated with PON1 activity, e.g. disorders of lipid and organo-
phosphorous metabolisms such as atherosclerosis or type II diabetes. They

are also used in gene therapy. Establishing PON1 haplotype or haplotype

pair of an individual is useful for improving the efficiency and

reliability of several steps including target validation, in the

construction and development of drugs for treating diseases associated with

PON1 activity. Transgenic animals are useful for studying expression of

the PON1 isogenes in vivo. The present sequence is an allele specific

coligonal and activity.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New genetic variants of human paraoxonase 1 (PON1) gene with polymorphisms, useful for treating disorders associated with PON1 isogene activity e.g. atherosclerosis or diabetes, or for screening drugs for
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                                                                                                                                                                                                                                                                                                                                                                                       Human; paraoxonase 1; PON1; single nucleotide polymorphism; transgenic;
                                                                                                                                                                                                                                                                                                                                                                                                        SNP; drug screening; organo-phosphorous metabolism; target validation; atherosclerosis; type II diabetes; gene therapy; antilipaemic; primer; allele specific oligonucleotide; ASO; ss.
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                                                                         Gaps
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                                    Length 15;
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                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                  Human PON-1 gene polymorphism detecting ASO primer #13.
Sequence 15 BP; 5 A; 1 C; 7 G; 1 T; 0 U; 1 Other;
                                14.2%; Score 10.4; DB 1; 78.6%; Pred. No. 9.8e+02; ive 1; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 6 A; 4 C; 1 G; 3 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Denton RR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 15; Page 15; 118pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Choi JY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                                                                                                     AAD45257 standard; DNA; 15 BP
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                                                                                                         929 TATCCCTCCTCTTC 942
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                                Query Match
Best Local Similarity
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AAD45257/c
                                                                   Matches
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TGGTTCAATGTA
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Human; ss; primer; rat hypertension-associated homologue; SAH; hypertension; chromosome 16p13.11; hypertensive; SNP; PCR; single nucleotide polymorphism; haplotype; genotype; isogene. Human SA homologue, SAH, allele specific primer #2. Chew A, Russo DP; ABK96346 standard; DNA; 15 BP. (GENA-) GENAISSANCE PHARM INC. 01-DEC-2000; 2000US-0250441P. 03-DEC-2001; 2001WO-US047011. (first entry) WPI; 2002-519582/55. WO200244201-A2. Bieglecki KM, Homo sapiens. 24-SEP-2002 06-JUN-2002 ABK96346;

Novel genetic variants of SA (Rat Hypertension-associated) Homolog isogenes, useful for improving efficiency and reliability in drug development for treating hypertension.

Claim 15; Page 14; 98pp; English.

The invention relates to an isolated polynucleotide (I) comprising a first nucleotide sequence (NS1) comprising SAH (SA, Rat Hypertension-cassociated Homologue isogene (II) selected from isogenes 1-15 and 17-20 given in the specification, where each isogene comprises the regions of NS1 and is further defined by the corresponding sequence (NS2) complementary to NS1. Alternatively, (I) comprises a coding sequence (NS2) complementary to NS1. Alternatively (I) comprises a coding sequence (NS2) complementary to NS1. Alternatively (I) comprises a coding sequence (NS2) complementary to NS1. Alternatively (I) comprises a coding sequence of SAH isogenes or fragments. Also included are methods of predicting the sasociation between a trait and at least one haplotype or haplotype pair of SAH genes, an isolated oligonucleotide for detecting a polymorphism in the SAH gene, a recombinant non-human organism transformed or transfected with the SAH polymucleotide, an isolated polypeptide comprising an amino acid sequence which is a polymorphic variant of the SAH protein, a monoclonal antibody specific for SAH, a computer system for storing and analysing polymorphism data for the SAH gene and a genome anthology for the SAH gene. The SAH proteins and haplotype/genotype methods are useful in streaming for drug discovery, development and therapeutic methods. The antibody is useful in diagnostic, prognostic and therapeutic methods SAH, in expressing SAH protein for use in screening for candidate drugs and in studying the effect of the variation on the biological activity of SAH as well as on the binding affinity of candidate drugs targeting and an albele specific primer for detecting SAH nucleic acids bearing a signal and an albele specific primer for detecting SAH nucleic acids bearing a signal and an albele specific primer for detecting SAH nucleic acids bearing a $oldsymbol{arphi}$

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Sequence 15 BP; 0 A; 6 C; 1 G; 7 T; 0 U; 1 Other;

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ch 14.2%; Score 10.4; DB 1; Length 15; 1 Similarity 78.6%; Pred. No. 9.8e+02; 11; Conservative 1; Mismatches 2; Indels
  Query Match
Best Local Similarity
Matches 11; Conserv
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The invention relates to a novel polymucleotide sequence which is a polymorphic variant of a reference sequence for the cofilin 1 (non-muscle) (CFL1) gene or its fragment, or a polymorphic variant of a reference sequence for a CFL1 CDNA or its fragment. The polymucleotide of the invention may have a use in gene therapy, and in antisense gene therapy. The polymucleotide is useful for studying the expression and function of CFL1 and expressing CFL1 protein for use in screening for candidate drugs to treat diseases related to CFL1 activity. The polymorphism and haplotype data are useful for validating whether CFL1 is a suitable target for drugs to treat immunological disorders, screening for such drugs and reducing bias in clinical trials of such drugs. The present sequence represents one of a set of allele-specific oligonucleotide (ASO) probes used in the invention to detect
                                                                                                                                                                                                                                              Human, cofilin 1, CFL1, gene therapy, antisense gene therapy; immunological disorder, ASO; allele-specific oligonucleotide; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel genetic variants of human cofilin 1, CFL1 gene for studying expression, function of the gene and expressing CFL1 protein useful in identifying drugs to treat immunological disorders.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 17; Page 13; 84pp; English.
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                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GENA-) GENAISSANCE PHARM INC.
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                                                                                                                  ABO88644 standard; DNA; 15
                             2 rrcrccrcrcrr 15
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                                                                                                                                                                                                                 Human CFL1 ASO probe #3.
928 TTATCCCTCCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Anastasio AE, Duda A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                   WO200194376-A1
                                                                                                                                                                                                                                                                                                     Homo sapiens.
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24-OCT-2002 (first entry)

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The invention comprises the amino acid and coding sequence of the human N-acetylgalactosaminidase (NAGA) alpha protein. The invention specifically comprises novel polymorphic sites identified within the NAGA gene. The NAGA gene is located on chromosome 22q13.2-q13.31, and encodes a lysosomal glycohydrolase that cleaves alpha-N-acetylgalactosaminyl moieties in glycoconjugates. The NAGA DNA and protein sequences of the invention are useful for studying the expression and function of NAGA and for screening candidate drugs to treat diseases related to NAGA activity. The NAGA gene polymorphisms identified in the present invention are useful for and genetyping the NAGA gene of an individual. The useful for haplotyping and genetyping the NAGA gene of an individual. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        present DNA sequence represents an N-acetylgalactosaminidase gene allele-specific oligonuclectide primer
                                                                      Human; PCR; primer; ss; gene therapy; N-acetylgalactosaminidase alpha;
chromosome 22q13.2-q13.31; lysosomal glycohydrolase; screening; SNP;
NAGA-related disease; single nucleotide polymorphism; haplotyping; NAGA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           New genetic variants of isolated N-acetylgalactosaminidase (NAGA), Alpha gene, useful for therapeutic purposes, for studying the expression and function of the polynucleotide, and for expressing NAGA protein.
                                    Human N-acetylgalactosaminidase (NAGA) alpha gene ASO primer 17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Paraoxonase 2 (PON2), allele specific oligonucleotide primer #22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14.2%; Score 10.4; DB 1; Length 15; 78.6%; Pred. No. 9.8e+02; ive 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 1 A; 5 C; 3 G; 5 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Paraoxonase 2; PON2; coronary heart disease; ASO; allele specific oligonucleotide; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                        07-JUN-2001; 2001WO-US018456.
                                                                                                                                                                                                                                                                                                              07-JUN-2000; 2000US-0210110P.
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Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-566449/60.
                                                                                                                                                                                                   WO200194637-A1.
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                                                                                                                                                                 Homo sapiens.
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                                                                                                                           genotyping
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The invention describes an isolated polynucleotide sequence comprising a paraxonase 2 (PON2) isogene. Primers and probes allow identification of this sequence and its polymorphisms and are useful for identifying which isoform of paraxonase 2 a person carries. Identification of a PON2 isoform allows tailored pharmaceutical treatment to be designed and administered. PON2 is a particularly important gene for the treatment of coronary heart disease. This sequence represents an allele specific oligonucleotide (ASO) primer used for detecting PON2 gene polymorphisms, described in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection; HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide; liver failure; hepatococliular carcinoma; HCV infection; drug therapy; type I interferon; interferon alpha; interferon beta; cytostatic; interferon gamma; consensus interferon; hepatotropic; antiinflammatory; substrate; hammerhead ribozyme; HH ribozyme; ss.
                                                                                                                                                                       An isolated polynucleotide comprising a paraxonase 2 (PON2) isogene encodes a pharmaceutically important protein for the identification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                               Nandabalan K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hepatitis C virus substrate #1011 for HCV hammerhead ribozyme #1011.
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                                                                                                               Lee HH,
                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 8 A; 0 C; 5 G; 1 T; 0 U; 1 Other;
                                                                                                             Denton RR,
                                                                                                                                                                                                                                     Claim 17; Page 13; 125pp; English.
                                                                                                            Choi JY,
                                                                                                                                                                                       encodes a pharmaceutically import
polymorphisms at the PON2 locus.
                                                                           (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
              18-MAY-2001; 2001WO-US016352.
                                             18-MAY-2000; 2000US-0205145P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABX01229 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-DEC-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11; Conservative
                                                                                                          Chew A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BLATT L.
MCSWIGGEN J A.
                                                                                                                                         WPI; 2002-121985/16
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PAVCO P A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hepatitis C virus
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                                                                                                            Anastasio AE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-MAR-1999;
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(PAVC/)
(MACE/)
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Claim 17; Page 14; 109pp; English.

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New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and
                                                                                                                                                                                                         cirrhosis, liver failure or hepatocellular carcinoma.
WPI; 2002-617759/66.
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Claim 1; Page 50; 80pp; English.

The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin (HP) motif where the binding arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV ribozymes are useful for modulating the expression and/or replication of HCV They can be used to treat cirrhosis, liver failure and/or hepatocellular carcinoma. The HCV ribozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon. The present sequence represents a substrate for a HCV hammerhead (HH) inbozyme. Note: Some of the sequence data for this patent did not form part of the printed specification. The complete sequence data for this patent was contained in electronic format directly from the USPTO web site at segdata.uspto.gov/psipsDIDEntry.html

Sequence 15 BP; 3 A; 6 C; 1 G; 0 T; 5 U; 0 Other;

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0
                                      Gaps
                                        .
0
Query Match
Best Local Similarity 58.3%; Pred. No. 9.8e+02;
Matches 7; Conservative 4; Mismatches 1; Indels
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ABL36360 standard; DNA; 15 BP. (first entry) 22-APR-2002 ABL36360; SSULT 593 3F36360/c

Human lysosomal acid phosphatase 2 (ACP2) allele-specific PCR primer 40.

Human; ss; lysosomal acid phosphatase 2; ACP2; gene; chromosome 11; lysosome-specific enzyme; orthophosphoric monoester hydrolysis; Hodgkin's disease; HD; acid phosphatase deficiency; novel polymorphic site; ACP2 haplotype; ACP2 genotype; polymorphism; transgenic animal; primer; probe; primer-extension oligonucleotide; SNP; single nucleotide polymorphism.

Homo sapiens

WO200194362-A2.

13-DEC-2001

07-JUN-2001; 2001WO-US018457.

07-JUN-2000; 2000US-0210047P.

Tanguay DA; Kliem SE, Messer C,

(GENA-) GENAISSANCE PHARM INC

Novel genetic variants of acid phosphatase 2, lysosomal polypeptide gene useful in studying expression and function of the protein, and for screening drugs to treat diseases e.g. Hodgkin's disease.

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The invention comprises the human lysosomal acid phosphatase 2 (ACP2)

uncleic acid and protein sequences. Specifically, the invention relates

to the discovery of 22 novel polymorphic sites within the APC2 gene. The

invention also comprises methods for haplotyping and genotyping the ACP2

gene in an individual. The ACP2 gene (located on chromosome 11) encodes a

Cyphoposphoric monoesters to alcohol and phosphate. The ACP2 gene and

cythophosphoric monoesters to alcohol and phosphate. The ACP2 gene and

cyphoposphoric monoesters to alcohol and phosphate. The ACP2 gene and

cyphoposphoric monoesters to alcohol and phosphate. The ACP2 gene and

cyphorphisms of the invention are useful in haplotyping the ACP2 gene.

ACP2 haplotyping is useful in validating ACP2 as a target (and designing

changs) for treating an ACP2-related disease or condition (e.g. Hodgkin's

disease and acid phosphatase deficiency). The ACP2 gene polymorphisms are

useful for ACP2 genotyping, which can also be used to develop diagnostic

tests and therapeutic treatments. The ACP2 protein and nucleic acids of

the invention are useful in the production of a transgenic animal which

cypresses ACP2 protein. The ACP2 protein and nucleic acids of

the invention are useful in the production of a transgenic animal which

cypresses ACP2 protein. The ACP2 protein and nucleic acids of

the invention are useful in the production of a transgenic animal which

cypresses act claimed ACP2 polymorphisms. Nucleic acids ABL36299-ABL362320

cypresses act and action of allele-specific objective provention are

cypresses action of the ACP2 polymorphisms. Nucleic acids ABL36299-ABL362320

cypresses action of the ACP2 polymorphisms. Nucleic acids ABL36291.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABL36364 represent claimed ACP2 allele-specific PCR primers. Nucleic acids ABL36365-ABL36408 represent claimed ACP2 primer-extension
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 5 A; 1 C; 6 G; 2 T; 0 U; 1 Other;
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ABZ95465 standard; DNA; 15 BP. (first entry) 17-0CT-2003 ABZ95465; 594 ABZ95465 PACKET STATE OF STATE

Human endothelin-1 antisense fragment no.1329.

Human, antisense; lung dysfunction, nasal airway dysfunction, antinflammatory steroid; ubiquinone; antinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.

Homo sapiens.

WO200285308-A2.

31-OCT-2002.

23-APR-2002; 2002WO-US013135.

24-APR-2001; 2001US-0286137P.

(EPIG-) EPIGENESIS PHARM INC

Aguilar D; Sandrasagra A, Katz E, Pabalan J, i, Shahabuddin S; Li Y, San Miller S, Nyce JW,

WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its

corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone

Disclosure, SEQ ID NO 10707; 872pp; English.

antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPPO first active agent comprising an oligomucleotide antisense.

Initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-excon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiaschmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an elicitation of the prophylactic or therapeutic respiratory effect of an elicitation. invention relates to a novel pharmaceutical composition, which has ftp.wipo.int/pub/published_pct_sequences

Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Score 10.4; DB 1; Length 15; Pred. No. 9.8e+02; 0; Mismatches 1; Indels ·; 14.2%; 91.7%; 917 GTCTTTGCCTTT 928 Conservative GICTITICCTIT 12 Local Similarity 11; Query Match Matches q

0;

Gaps

; 0

Human endothelin-l antisense fragment no.1319. ABZ95455 standard; DNA; 15 BP. 17-0CT-2003 ABZ95455; ABZ95455

(first entry)

Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.

Homo sapiens,

WO200285308-A2

31-OCT-2002.

23-APR-2002; 2002WO-US013135.

24-APR-2001; 2001US-0286137P.

(EPIG-) EPIGENESIS PHARM INC

Nyce JW,

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its Katz E, S; Sandrasagra A, L, Shahabuddin WPI; 2003-229219/22. Li Y, Sa Tang L, Miller S,

Aguilar D;

Pabalan J,

The invention relates to a method for forming nucleic acid multiplex, particularly triplexes and quadruplexes, by using accelerator agents such

Forming nucleic acid multiplex, particularly triplexes and quadruplexes, by using accelerator agents such as cations to create them.

WPI; 2003-183992/18.

Example 12; Page 76; 61pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, 5' or 2' end genomic flanking regions, 5' and 3' intron-exon junctions or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or masal airway dysfunction and a second active agent comprising an cartinflammatory steroid and ubiquinone. A composition of the invention and antiinflammatory, antiallergic, antiasthmatic, hypotensive, communosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or mallignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antifalmmatory steroid in a subject, for reducing or depleting levels of of or receptor, producing bronchodilation, increasing levels of adenosine creceptor, producing bronchodilation, increasing levels of ubiquinone or lung suffactant in a subject stissue, or treating bronchoconstriction, lung allergies, or a respiratory disease or condition.

Cure in subject stissue, or a respiratory disease or condition.

Cure in subject stissue, or a respiratory disease or condition.

Cure in subject stissue, or a respiratory disease or condition.

Cure in subject stissue, or a respiratory disease or condition, and fireful and printed specification, but was obtained in electronic format directly from WIPO ô corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or Gaps Nucleic acid multiplex; Watson-Crick duplex; drug designing; human; .. Score 10.4; DB 1; Length 15; Pred. No. 9.8e+02; 0; Mismatches 1; Indels Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other; 8 Human cystic fibrosis gene specific probe No. Picard P; Disclosure; SEQ ID NO 10697; 872pp; English Kandic I, AADS4792/c ID AADS4792 standard; DNA; 15 BP. 31-MAY-2002; 2002WO-IB001972. 14.2%; 91.7%; 20-JUN-2001; 2001US-00885731. (first entry) 917 GTCTTTGCCTTT 928 11; Conservative 1 Greifitecitr 12 cystic fibrosis; probe; Daksis JI, (INGE-) INGENEUS CORP Best Local Similarity Matches 11: Conserv WO2002103051-A2. 26-JUN-2003 Homo sapiens Erikson GH, 27-DEC-2002. AAD54792; Query Match RESULT 596 ò D

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as cations to create them. The method is useful for creating a nucleic acid multiplex, especially a triplex or quadruplex. The method discriminates between a perfect base-pairing rules match, a one base mismatch or deletion, and a 2-base mismatch or deletion, between the duplex and the single-stranded molecule in the triplex, or between the first and second Watson-Critck duplexes. The method enables quantifying the binding affinity between probes and target. The information is whuable for a variety of uses including designing antisense drugs with optimised binding characteristics. The present sequence is human cystic fibrosis gene specific probe. This sequence is used to illustrate the method of the invention
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Sequence 15 BP; 8 A; 3 C; 2 G; 2 T; 0 U; 0 Other;

ö Gaps . Score 10.4; DB 1; Length 15; Pred. No. 9.8e+02; 0; Mismatches 1; Indels Query Match 14.2%; Best Local Similarity 91.7%; Matches 11; Conservative

907 ATTITCTTTGGT 918 ~ 13 ATCTTCTTTGGT

SSULT 597

AAD54802 standard; DNA; 15 BP. AD54802

(first entry) 26-JUN-2003

AAD54802;

Human cystic fibrosis gene specific probe No. 18.

multiplex; Watson-Crick duplex; drug designing; human; sis; probe; ss. cystic fibrosis; probe; Nucleic acid

Homo sapiens

WO2002103051-A2.

27-DEC-2002

31-MAY-2002; 2002WO-IB001972.

20-JUN-2001; 2001US-00885731

(INGE-) INGENEUS CORP.

Picard P; Kandic I, Daksis JI, Erikson GH, \times $0 \times$ $1 \times$ $2 \times$ $2 \times$ $3 \times$

WPI; 2003-183992/18.

Forming nucleic acid multiplex, particularly triplexes and quadruplexes, by using accelerator agents such as cations to create them.

Example 12; Page 77; 61pp; English.

such The invention relates to a method for forming nucleic acid multiplex, particularly triplexes and quadruplexes, by using accelerator agents suc as cations to create them. The method is useful for creating a nucleic acid multiplex, especially a triplex or quadruplex. The method discriminates between a perfect base-pairing rules match, a one base mismatch or deletion, and a 2-base mismatch or deletion, between the first and second Watson-Crick duplexes. The method enables quantifying the binding affinity between probes and target. The information is valuable for a variety of uses including designing antisense drugs with optimised binding characteristics. The present sequence is human cystic fibrosis gene specific probe. This sequence is used to illustrate the method of the invention

Sequence 15 BP; 2 A; 2 C; 3 G; 8 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New anti:sense nucleic acid against C-erbB-2 - for treating or preventing neoplasms, immune disease and angiogenesis, also for diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pathological angiogenesis when associated with c-erbB-
may also be used to detect expression of the relevant
                                                                                                                                                                                                                                                                             Antisense nucleic acid; c-erbB-2; inhibition; fibroblast; neoplasm; p185-erbB-2 protein tyrosine kinase; tumour; breast cancer; detection; immune disease; angiogenesis; ss.
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 Length 15;
                             Indels
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Score 10.4; DB 1;
Pred. No. 9.8e+02;
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                           0; Mismatches
                                                                                                                                                                                                                                                      c-erbB-2 antisense nucleic acid #101.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Page 46; 55pp; English.
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91.78;
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 14.2%;
91.7%;
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                                                             907 ATTTTCTTTGGT
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                Best Local Similarity
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p185-erbB-2 protei
                                                                                                                                                                                                                                                                                                                                                                         W09517507-A1.
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                                                                                                                                                                                                                            13-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                      29-JUN-1995.
                                 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Brysch W,
                                                                                                                                                                                                                                                                                                                                               Synthetic.
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Best Local &
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      Query Match
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AAV54275/c
ID AAV542
XX
AC AAV542
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AAQ92758/c
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(first entry)

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Primer KC164 used in the method of the invention.
                                                                                                                                                                                                                                    Sequence 16 BP; 8 A; 5 C; 3 G; 0 T; 0 U; 0 Other;
                                                                                                                               Disclosure, Fig 21D; 150pp; English.
                                                                                                                                                                                                                           and in diagnostic applications
                                                                                    (SUNO-) SUNOL MOLECULAR CORP
                                                                                                     WPI; 1998-506374/43.
                                                WO9839482-A1
                                                                 05-MAR-1998;
                                                                           07-MAR-1997;
     29-DEC-1998
                                                                                            Weidanz JA,
                                                         11-SEP-1998
                                       Synthetic.
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Wong HC;

Card KF,

98WO-US004274. 97US-00813781.

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This sequence represents a probe for a region of the CCR5 gene. The invention relates to a method for the determination of susceptibility of an individual to non-syncytia-inducing (NSI) forms of human immunodeficiency virus type I (HIV-1), by detecting whether the individual is homoxygous mutant, heterozygous or homozygous wild type for the CCR5 chemokine receptor gene. The method can be used to predict susceptibility of an individual to infection by NSI forms of HIV-1 and for predicting disease progression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fusion protein; soluble; immunoglobulin; Ig; sc-TCR; immune response; single-chain T-cell receptor; T cell activation; therapy; PCR primer; ss.
Probe; CCR5 gene; non-syncytia-inducing; HIV-1; mutation detection; chemokine receptor gene; infection; disease progression prediction;
                                                                                                                                                                                                                                                                                                                                                                                                            Determination of zygosity of CCR5 chemokine receptor gene in an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Soluble sc-TCR fusion protein constructing primer KC164.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 16 BP; 7 A; 3 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14.2%; Score 10.4; DB 1
91.7%; Pred. No. 1e+03;
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 10; Page 24; 36pp; English.
                                                                                                                                                                                                                                     97US-00928465.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX55357 standard; DNA; 16 BP.
                                                                                                                                                                                               98WO-US019007.
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                                                                                                                                                                                                                                                                                (ALKU ) AKZO NOBEL NV
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                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-263372/22
                                                                                                                                                                                                                                                                                                                             Romano JW, Lee EM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                        4-SEP-1998;
                                                                                                                                                                                                                                     12-SEP-1997;
                                                                                                       W09913112-A1
                                                                                                                                                  18-MAR-1999,
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                                                                                                                                                                                                                                                                                                                                                                                                                                   individual
                                                                 Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 601
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present primer was used to construct DNA vectors which were used in the method of the invention. The invention provides single chain T-cell creceptor (scTCR) fusion proteins which comprise of a bacteriophage coat protein (BCP: e.g. gene III or VIII product) covalently linked to a scTCR comprising of a V-alpha chain (Vac) covalently linked to a scTCR comprising of a V-alpha chain (Vac) by a peptide linker sequence. The BCP increases solubility of the scTCR fusion proteins are fully soluble and functional, and can be scTCR fusion proteins are fully soluble and functional, and can be scTCR fusion proteins are folding steps. The scTCR fusion proteins can be produced in a variety of formats including bacteriophage display libraries to screen for binding molecules which specifically bind the scTCR fusion proteins. The scTCRs are claimed to be useful for reducing an immune response by competing with an antigen with T-cell receptors (TCR) occurring on pathogenic T cells such as those accompanying cancer, infectious disease, allergy, etc. The scTCRs are also claimed to be useful for inducing an immune response for immunisation against TCR structures to reduce or eliminate the pathogenic or undesirable effects and its and they can also be used for the production of antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                     PCR; primer; amplification; single chain T-cell receptor; scTCR; Vbc; bacteriophage coat protein; BCP; V-alpha chain; Vac; V-beta chain; immune response; T-cell receptor; TCR; cancer; allergy; T lymphocyte; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New soluble T cell receptor fusion proteins - comprise V-alpha chain, peptide linker, V-beta chain and bacteriophage coat protein, used to, e.g. develop products for modulating immune responses.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14.2%; Score 10.4; DB 1; Length 16; 91.7%; Pred. No. 1e+03; ive 0; Mismatches 1; Indels
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; 0

Gaps

·. 0

Wong HC;

Card KF,

Weidanz JA,

WPI; 1999-264000/22.

(SUNO-) SUNOL MOLECULAR CORP.

AAX28404 standard; DNA; 16 BP

RESULT 600 AX28404/c AAX28404;

917 GICTITGCCTIT 928

Greifigegrif 2

13

Query Match
Best Local Similarity 91.7
Matches 11; Conservative

21-JUN-1999 (first entry)

XXXXXXXX

Probe for CCR5 gene

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The invention relates to a soluble fusion protein that comprises an immunoglobulin (Ig) light chain constant region or fragment, covalently linked to a single-chain T-cell receptor (scrTCR) comprising a V-alpha chain covalently linked to a V-beta chain by a peptide linker sequence. The soluble fusion protein can induce an immune response in a mammal, so that the mammal is immunized against pathogenic T cell receptor epitopes. It can also be used to inhibit T-cell activation in a mammal. The sc-TCR can be used to inhibit T-cell activation in a mammal. The sc-TCR proteins can be used in vitro to detect and analyse ligands such as peptides and MHC/HLA molecular components of TCR ligands. They can also be used to detect T-cells with pathogenic properties. Other uses include functional, cellular and molecular assays and structural analysis. In vivo the sc-TCRs can compete with pathogenic T cells or to raise attibodies for use in therapy. Fusion of an Ig light chain constant region to a sc-TCR facilitates soluble expression. The science is solubilisation, cleaving or re-folding steps. The fusion also confers a means of detecting and purifying the fusion proteins by conventional means of contents and molecular assays and structured porter.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  immunological methods. Sequences AAX55301 to AAX55445 represent PCR primers used for constructing the fusion proteins of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Triple helix forming nucleotides 2771-2786 of Hepatitis B virus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14.2%; Score 10.4; DB 1; Length 16; 91.7%; Pred. No. 1e+03;
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Pred. No. 1e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 16 BP; 8 A; 5 C; 3 G; 0 T; 0 U; 0 Other;
Soluble single-chain T cell receptor proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
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                                                         6D; 145pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAX14780 standard; DNA; 16 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hepatitis B virus.
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                                                            Example; Fig
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US5861244-A.
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The present sequence represents a potential triple-helix forming region.

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It can be used to demonstrate the assay of the invention. The assay comprises adding a sample containing double-stranded DMA test sequences, e.g. containing the present sequence, to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is sequence. Triples formation results in displacement of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (Dy detecting genes for ribosomal RNA) in clinical samples, but also detection of oncogenes and Hepatitis B Virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Detecting a virus comprises a probe formed between at least two same energy donor fluorescent pigments (dfp) and an energy acceptor fluorescent pigment (afp) in which the energy from (dfp) is relayed to
                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                 14.2%; Score 10.4; DB 1; Length 16; 91.7%; Pred. No. 1e+03; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        labelled probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 16 BP; 3 A; 1 C; 3 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                  Sequence 16 BP; 8 A; 0 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           detection probe; FRET; labelle resonance energy transfer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "modified by Cy5"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 10; 40pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (afp) successively and transferred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        detection probe #12.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
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/mod_base=
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                                                                                                                                                                                                                                                                                                                           933 CCTCCTCTTCAT 944
                                                                                                                                                                                                                                                                                          11; Conservative
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                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 11; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Target virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               fluorescence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Target virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-MAR-1999;
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Invention
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  Length 16;
       le+03;
-hag 1; Indels
Score 10.4; DB 1;
Pred. No. 1e+03;
0; Mismatches 1;
 14.2%;
91.7%;
                                          905 TCATTTTTTG 916
          Local Similarity 91.7 1es 11; Conservative
                                                             1 rGATTTTCTTTG 12
 Query Match
                   Matches
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RESULT 604 AAS15890/c

AAS15890 standard; DNA; 16 BP. AAS15890;

(first entry) 23-JAN-2002

Target feature for primer selection, used to screen regulatory genes.

Cancer; chemotherapy; gene therapy; neurological disorder;
Alzheimer's disease; Huntingdon's disease; Parkinson's disease;
cardiovascular disorder; myocardial hypertrophy; atherosclerosis;
myocardial infarction; bone disorder; muscle disorder; osteoarthritis;
osteoporosis; blood disorder; systematic lupus; primer design, ss.

Synthetic.

WO200175162-A2

11-OCT-2001

29-MAR-2001; 2001WO-US010096.

31-MAR-2000; 2000US-019388P.

29-MAR-2001; 2001US-00820531. 31-MAR-2000; 2000US-0193888P.

(UYLO-) UNIV LOUISVILLE RES FOUND INC.

Wang E;

Array of nucleic acids selective for genes comprising common regulatory sequence, useful for identifying drug targets or disease markers and in WPI; 2001-662978/76. drug screening

Microarrays for screening regulatory gene associated with neurological disorders, cardiovascular disorders, bone and muscle disorders, blood or circulation related disorders, and cancer.

WPI; 2002-171142/22.

(WANG/) WANG

Wang E;

Example 1; Page 7; 14pp; English.

Example 1; Page 20; 34pp; English.

selectively to a gene comprising a regulatory sequence and a promoter, that require the presence of the nucleic acid for gene expression. The method is used to identify drug targets or disease-specific markers, and to determine the response of diseases to drugs or other treatments, e.g. to define risk factors; for diagnosis and prognosis of stages of cancer, to monitor chemcherapy or gene therapy, and for drug disease and neurological (e.g. Alzheimer's disease, Parkinson's disease and Huntingdon's disease), cardiovascular (e.g. Myccardial hypertrophy, atheroscierosis and myccardial infarction), bone and muscle (e.g. osteoarthritis and osteoporosis), blood or circulatory diseases (e.g. Systematic lupus) or cancer). The method provides rapid and sensitive analysis of genetic information associated with a common regulatory sequence, associated with a particular disease or state, and requires only very small amounts of material Grouping genes from their regulators, rather than function, allows immediate association of specific pathways and quantification of changes in gene expression allows in the control of changes in gene expression allows in the control of changes in gene expression allows in the control of changes in gene appression allows in the control of changes in gene expression allows in the control of changes in gene expression allows in the control of changes in gene expression allows in the control of changes in gene expression allows in the control of changes in gene expression allows in the control of changes in gene expression allows in the control of changes in gene appression allows in the control of the changes in gene appression allows in the control of the changes in gene appression allows in the change of the changes in gene appression allows the change of the changes in gene expression allows in the change of the changes in gene expression allows the change of the changes of gene hierarchy to be established. Only minor genes are selected for the microarray, this prevents their expression being obscured by that of strongly expressed genes (adjacent to them on the array). This sequence is the target feature of a regulatory gene identified by using database search methods and alignments based on the synthetic core element (see invention describes a novel array of nucleic acids each binding AAS15889) described in the method of the invention

Sequence 16 BP; 7 A; 3 C; 4 G; 2 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                                                                             Human; ds; promoter; core element; GHRHR; neurological disorder; cardiovascular disorder; bone disorder; muscle disorder; blood disorder; circulation disorder; cancer; Alzheimer's disease; Parkinson's disease; Huntington's disease; atherosclerosis; myocardial infarction; osteoparosis; autoimmune disorder; brain tumour; chronic lymphocytic leukaemia; acute lymphocytic leukaemia;
                                                            Gaps
                                                              ..
                       Length 16;
                                                          Indels
                                                          1;
                     Score 10.4; DB 1;
Pred. No. 1e+03;
); Mismatches 1;
                                                                                                                                                                                                                                                                                                                                         Human GHRHR promoter core element sequence.
                                                                                                                                                                                                                             ABK15234 standard; DNA; 16 BP.
(first entry)
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                                                                                              900 CCTGGTCATTT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
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                                                                                                                                                                                        RESULT 605
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The invention relates to microarrays and primers useful for detecting and analysing expression of nucleic acids associated with disorders and diseases, e.g. neurological disorders, cardiovascular disorders, bone and muscle disorders, blood or circulation related disorders, and cancer e.g. an array comprising (at distinct locations on a substrate) nucleic acid molecules each selectively binding to a gene comprising a regulatory sequence and a promoter (each promoter interacts with a second nucleic acid molecule binding to the regulatory sequence or whose expression is dependent on this binding). The methods, microarrays and primers are used to analysed the expression of gene involved in disorders and disease, to analysed the expression of gene involved in disorders and disease. Huntington's disease, mycorafial hypertrophy, atherosclerosis, mycoardial infarction, osteoarthritis, osteoporosis, and autoimmune disorders, chuntington's disease, mycoardial hypertrophy, prostatic cancer, colon cancer, chronic lymphocytic lukaemia, acute lymphocytic leukaemia, brain tumour, pancreatic cancer, and hepatomas. The current technology of gene screening using large numbers of genes grouped by functional capability concenting using large numbers of data, which produces subsequent problems in data evaluation. For example, when a known chip bearing the coding regions of 10000 genes is screened, it provides perhaps a few hundred genes whose expressions may display significant gain or loss for a given computance in mportance in terms of upstream or downstream function is a very tedious task, requiring a lot of manpower and computing time. Using

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cassettes of gene microarrays manufactured according to regulatory modality avoids this problem, i.e., positive or negative changes of gene expression on a given five or six DNA microarrays provides immediate assessment of which pathways are involved, since these microarrays are designed according to regulatory pathways. Furthermore, the quantitative levels of gain or loss of gene expression for a given gene provide self-evident implications of the hierarchic order of genes, with regard to the separation of a master gene switch versus pedestrian gene changes. Due to the genes being grouped into subsets according to regulatory modality for gene expression provides a platform for gene microarrays of similar abundance of gene expression. The present sequence is a core element sequence from the promoter of human growth hormone releasing hormone receptor (GHRHR) used in an experiment to demonstrate the method of the invention
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SSULT 606
3T33714/c
3 ABT33714 standard; DNA; 16 BP.

I Tritz R, Keily B, Habita C, Robbins J, Barber J;
K
K WPI; 2003-129308/12.

14-MAY-2001; 2001US-0290927P.

(IMMU-) IMMUSOL INC

New isolated nucleic acid molecule useful for regulating apoptosis induction in cells, for inhibiting the growth of cancer in subjects, and

Example 3; Page 41; 153pp; English.

for drug screening.

The invention relates to a novel isolated molecule comprising bases 2-8 or 13-16 of 2 16 base pair sequences, or comprising a 1731 base pair sequence, all given in the specification or at least 95 % identity with the 1731 bp sequence. The nucleic acid molecule is useful in regulating apoptosis in cells and in drug screening. The method is useful in facilitating the induction of apoptosis in cells, in identifying an agent that can facilitate the induction of apoptosis in cells, and in inhibiting the growth of a cancer. This polynucleotide sequence represents a ribozyme binding substrate sequence relating to the invention

Sequence 16 BP; 8 A; 0 C; 7 G; 1 T; 0 U; 0 Other;

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0;
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Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
                                                                                                                                                                                                                                                               gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; intercellular adhesion molecule; rel A; tumour necrosis factor; trensplocation; cepitatory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                              Human TNF-alpha hammerhead ribozyme target sequence (nt position 193).
                          Gaps
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                                                                                                                                                                                                                                                      Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
  Length 16;
                           Indels
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Score 10.4; DB 1;
Pred. No. 1e+03;
                          0; Mismatches
                                                                                                                                          BP.
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94US-00303039.
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94US-00227958
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  Query Match 14.2%;
Best Local Similarity 91.7%;
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                           AAT55663 standard; RNA; 15
                                                                                                                                                                                                         (first entry)
                                                    TTTTATCCCTCC 937
                                                                                                                                                                                            (revised)
                                                                             14 Trrrcrccrcc
                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                     W09523225-A2
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21-MAR-1997
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15-APR-1994;
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                                                                                                                  enzymatic mucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes are designed to cleave the target sequences and thereby inhibit TNF-alpha expression, making them potentially useful for treating rheumaroid arthritis, septic shock and other inflammatory disorders including psoriasis, as well as for treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
                                                methods for producing them - for use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; INF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                         The present sequence represents a preferred target sequence for an
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                                                                                                                                                                                                                                                                                             14.0%; Score 10.2; DB 1; Length 15; 46.7%; Pred. No. 1.1e+03; ative 5; Mismatches 3; Indels
                                                                                                                                                                                                                                                                        Sequence 15 BP; 0 A; 8 C; 1 G; 0 T; 6 U; 0 Other;
  Woolf T;
                                               Ribozymes having modified bases and
                                                            in inhibiting disease related genes
                                                                                 Claim 2; Page 241; 407pp; English.
 Wincott FE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94US-0021109.
94US-00218934.
94US-00222795.
94US-0022795.
94US-00227958.
94US-0028641.
94US-0028641.
                                                                                                                                                                                                                                                                                                                                              923 GCCTTTTATCCCTCC 937
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                                                                                                                                                                                                                                                                                                                                                             Respiratory syncytial virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                AAT56959 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 46.77
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (revised)
                       WPI; 1995-351090/45
 Usman N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-MAY-1994;
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Tracz D,
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Op
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Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Grimm S, Karpelsky A, Risich K, Matulic-Adamic J, Mcswiggen JA; Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD; Tracz D, Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence represents a preferred target sequence for an protein caid (i.e. a ribozyme) which cleaves mRNA coding for a protein of respiratory syncytial virus (RSV) at the nucleotide base position indicated in the DE line. Regions of the mRNA, that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the target sequences and can be used for treatment and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 6 A; 3 C; 1 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 2; Page 269; 407pp; English.
                94US-00291433.
94US-00292620.
94US-00293620.
94US-00300000.
94US-00311446.
94US-00311749.
94US-00318771.
94US-0031897.
94US-0031993.
94US-00334697.
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94US-00357577.
94US-00291932
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nes 12; Conservative
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28-SEP-1994;
03-OCT-1994;
                                                                19-AUG-1994;
                                                                                                         08-SEP-1994;
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atherosclerosis, myocardial infarction; stroke; restenosis;
transplant rejection; theumatoid arthritis; psoriasis;
myocardial ischaemia; Kawaseki disease; septic shock; HIV;
human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
inflammation; autoimmune disease;
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Respiratory syncytial virus

WO9523225-A2

31-AUG-1995

23-FEB-1995;

94US-00201109.
94US-00218934.
94US-00224483.
94US-00224483.
94US-0022858.
94US-0021832.
94US-0029133.
94US-0029133.
94US-0039133.
94US-00391349.
94US-00311749.
94US-00311749. 07-APR-1994; 15-APR-1994; 15-APR-1994; 18-MAY-1994; 06-JUL-1994; 15-AUG-1994; 16-AUG-1994

17-AUG-1994 19-AUG-1994

02-SEP-1994; 08-SEP-1994; 23-SEP-1994; 23-SEP-1994; 03-OCT-1994; 07-OCT-1994;

94US-00345516. 94US-00357577. 94US-00363233. 28-NOV-1994; 16-DEC-1994; 23-DEC-1994; 30-JAN-1995; 10-NOV-1994

(RIBO-) RIBOZYME PHARM INC.

95US-00380734

, DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA; Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD; Woolf T; Wincott FE, Usman N, Stinchcomb Grimm S, Modak A, Tracz D,

WPI; 1995-351090/45.

Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.

Claim 2; Page 269; 407pp; English.

The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a protein of respiratory syncytial virus (RSV) at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the target sequences and can be used for treatment and diagnosis of RSV infection. (Updated on 25-MNA-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct PI

Sequence 15 BP; 8 A; 3 C; 1 G; 0 T; 3 U; 0 Other;

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                                  Gaps
                                  .
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14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03;
                                Indels
                                0; Mismatches
   Query Match
Best Local Similarity 80.03
Matches 12; Conservative
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Arthritic condition, graft tolerance, immune response, target, cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                                                                            Human B7-1 hammerhead ribozyme target SEQ ID NO:1410.
                                                                                                                                                                                                                 94US-00354920.
94US-00363253.
94US-0036354.
95US-00426124.
95US-00432874.
95US-00434509.
                                                                                                                                                                                                    95WO-US015516
                                                                                                                                                                                                                                                                    95US-0000951P.
95US-0000974P.
944 TIGGITIAAIGIAIC 958
                                                  AAX64778 standard; RNA; 15
              rrcarrerarcrarc 1
                                                                               20-JUL-1999 (first entry)
                                                                                                                                          diagnosis; ss
                                                                                                                                                                                                                 13-DEC-1994;
23-DEC-1994;
23-DEC-1994;
17-FEB-1995;
                                                                                                                                                         Homo sapiens.
                                                                                                                                                                       WO9618736-A2.
                                                                                                                                                                                                                                                            04-MAY-1995;
07-JUL-1995;
07-JUL-1995;
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                                                                                                                                                                                     20-JUN-1996.
                                                                                                                                                                                                                                               20-APR-1995
02-MAY-1995
              13
                                                                 AAX64778;
                                     610
                                    RESULT
                                                    à
             dd
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Enzymatic nucleic acid molecules having a hammer-head motif - used for the treatment of arthritis, induction of graft tolerance or treatment auto-immune diseases. Stinchcomb DT, Jarvis T, Draper K, Gustofson J, Usman N, Wincott F, M Thompson JD, Modak A, Burgin A; WPI; 1996-300653/30. Beigelman L, Mcswiggen J, Karpeisky A,

, Pavco P; Matulic-Adamic J;

95US-00512861 95US-00541365

07-AUG-1995 05-OCT-1995 (RIBO-) RIBOZYME PHARM INC.

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Claim 10; Page 168; 307pp; English.

The present invention describes a novel enzymatic nucleic acid (ENA)
having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
(c) (ii) a 2'-C-allyl modification at position 4 of the ENA; (ii) at least
(c) (ii) a 2'-C-amethyl modifications; and (iv) a 3'-end modification. The ENA's
(c) can inhibit collagenase and stromelysin production in the synovial
(c) particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
(d) particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
(e) be used to treat antigen presenting cells of a donor to induce tolerance
(c) in a recipient to an alloantigen of a donor. They can also be used for
(c) enhancing graft tolerance or for treating autoimmune disease, and for
(c) creating allergies and other inflammatory conditions. The ENA's can also
(c) be used in diagnosis. Rhozyme therapy impacts on the expression of
(c) stromelysh without introducing the non-specific effects upon gene
(c) expression which accompany treatment with retinoids and dexamethasone.
(The concentration of ribozyme required to affect a therapeutic treatment
(c) is lower than that required of antisense molecules, and is highly
(c) specific. The present sequence is used in the exemplification of the

schultz1-899.rng

Page 297

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Mannose binding protein; MBP gene; human; infection, depression; chronic fatigue syndrome; irritable bowel syndrome; HBV; hepatitis B virus; Gulf Mar syndrome; polymerase chain reaction; PCR; primer; dot-blot hybridisation; probe; ss.
                                                                                                                         Mannose binding protein gene codon 57 mutant PCR primer.
                                         AAT84340 standard; DNA; 15
                                                                                                                                                                                                                                             WO9705279-A1
                                                                                               11-NOV-1997
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                                                                                                                                                                                                                      Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention concerns an apparatus for enhanced detection of a biological reaction between a sample and an active area of a biochip, comprises the biochip and a fluidic system designed to pass the sample over the active area. The apparatus can be used for diagnosis, analysis and multistep/multiplex reactions (including synthesis of biopolymers), especially those involving nucleic acid hybridisation (but also antigenantiody reactions). Use of a flow system improves diagnostic efficiency, allows more complete sampling and the detection device provides imaging of very small volumes. Together these elements provide a highly automated DNA analysis system from self-addressable and self-assembling electronic components. APATA6987-91 are HLA sequences used in an experiment using the
                                                                                                                                                                                                                                                                                                        apparatus; enhanced detection; biological reaction; biochip; fluid system; diagnosis; analysis; multistep; multiplex reaction; synthesis; biopolymer; automated DNA analysis system; self-addressable; self-assembling; electronic; target probe; denaturisation; APEX chip; ss.
                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Self-addressable and self-assembling system for biological reactions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jackson TR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   comprises array of specific binding regions on biochip, also new fluorescence detection system and stringency control device.
                                                                               0;
                                                       Length 15;
                                                                               3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sosnowski RG,
                      Sequence 15 BP; 4 A; 2 C; 2 G; 0 T; 7 U; 0 Other;
                                                14.0%; Score 10.2; DB 1;
40.0%; Pred. No. 1.1e+03;
rative 6; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 4 A; 2 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oconnell JP, Juncosa RD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Fig 10; 69pp; English.
                                                                                                     944 TTGGTTTAATGTATC 958
                                                                                                                                                                                                                                                                                                                                                                                                                                                        96WO-US014353.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95US-00534454
                                                                                                                    AAT46989 standard; DNA; 15
                                                                                                                                                                                                                                                   01-DEC-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     apparatus of the invention
                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1997-212892/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (NANO-) NANOGEN INC.
                                                               Local Similarity
present invention
                                                                                                                                                                                                                                                                               HLA sequence 28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                  WO9712030-A1
                                                                                                                                                                                                                                                                                                                                                                                                                             03-APR-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Heller MJ,
                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                          AAT46989;
                                                   Query Match
                                                                                                                                                                                   AAT46989/
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This primer sequence is based on a human mannose binding protein (MBP) gene exon 1 codon 57 mutant sequence. Primers (AAT84335-40) based on wild type or mutant exon 1 codon 52, codon 54 or codon 57 sequences can be utilised in claimed kit and sequence-specific oligonucleotide (SSO) dotblot hybridisation methods for establishing the MBP genotype of a subject. A mutation in codon 52 of exon 1 is indicative of susceptibility to chronic viral infection, chronic fatigue syndrome, depressive disease, irritable bowel syndrome, Gulf War syndrome and/or hepatitis B virus infection. A mutation is one or more of codons 52, 54 or 57 of exon 1 of the MBP gene of a child or foetus is indicative of susceptibility to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                          Predicting susceptibility to, and outcome of, infection - comprises determining presence of mutation in the mannose binding protein gene, esp. in codon 52 of exon 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Triple helix forming nucleotides 13280-13294 of the dystrophin gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.16+03; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   recurrent childhood infection and premature birth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 9 A; 2 C; 4 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                       TECHNOLOGY & MED.
                                                                                                                                                                                                                             Main J;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 21; Page 32; 42pp; English.
                                                   95GB-00015393.
95GB-00021025.
96GB-00014414.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
     96WO-GB001819.
                                                                                                                                                              (UNLO ) IMPERIAL COLLEGE SCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           934 CTCCTCTTCATTGGT 948
                                                                                                                                                                                                                    Thomas HC, Summerfield JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX14658 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15 CTTTTCTTCCTTGGT
                                                                                                                                                                                                                                                                       WPI; 1997-145713/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
25-JUL-1996;
                                                                                  13-OCT-1995;
09-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX14658;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX14658
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Gaps

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3; Indels

14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03; Live 0; Mismatches 3; Indels

929 TATCCCTCCTCTCA 943

Conservative

Local Similarity Les 12; Conserv

Query Match Best Loca Matches 15 TAGCCCTCCTGTCCA 1

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence represents a potential triple-helix forming region. It can be used to demonstrate the assay of the invention. The assay comprises adding a sample containing double-stranded DNA test sequences, e.g. containing the present sequence, to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria DNA detecting genes for ribosomal RNA) in clinical samples, but also detection of oncogenes and Hepatitis B virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Toggle switch; P-L promoter; clts gene; lac1; Escherichia coli; P-trc; ribosome binding site; promoter; adjustable-threshold switch; model; multi-state oscillator; gene regulation; cell cycle; cancer; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify bacteria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·;
Triple-helix forming region; Triplex formation; DNA detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ribosome binding site A for use in toggle switch constructs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03; ive. 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 0 A; 3 C; 0 G; 12 T; 0 U; 0 Other;
                                identification; bacteria; oncogene; virus; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Col 15-16; 168pp; English.
                                                                                                                                                                                                                                                                                                                                                                            (PROF-) PROFILE DIAGNOSTIC SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA29142 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US028592
                                                                                                                                                                                                                                                             93US-00173489.
                                                                                                                                                                                                                                                                                                                      92US-00968436,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        908 TITICITIGGICITI 922
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Wang C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-130384/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200032748-A1.
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                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                22-DEC-1993;
                                                                                                                                                                                                                                                                                                                         29-OCT-1992;
                                                                                                                                               US5861244-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Hepburn AG,
                                                                                                                                                                                                          19-JAN-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA29142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ESULT 614
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AAA29142-49 are oligonucleotides comprising ribosome binding sites used in construction of a "toggle switch". The toggle switch constructs switch expression of a gene of interest between stable "on" or "off "states in response to a transiently applied agent. Other genetic "applets "i.e. a network of interacting genes, are provided. The genetic "applets are camplified by toggle switch constructs, adjustable-threshold switch constructs (for expressing a gene of interest in response to the constructs (for expressing a gene of interest in response to the custained application of an agent at a concentration above or below a desired threshold concentration) and multi-state oscillator constructs (where expression of a gene of interest is periodically altered in the absence of administration of agents which are extraneous to the construct). The applets provide a model for gene networks which have construct). The applets provide a model for gene networks which have construct). The toggle switch constructs contain two mutually inhibitory genes. The toggle switch constructs contain two mutually inhibitory genes. Promoter 1, efficiently transcribes gene 1 unless inhibited by the repressor protein encoded by gene 2. Promoter 2 efficiently transcribes cape 1 and say agents, one inducing transcription of the gene of interest, the other repressing it. In particular, the constructs are useful for controlling the cell cycle, for treating cancer, and for developing a contactive theory of gene expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E. coli ompA gene fragment, comprising ribosome binding site and 5'UTR.
                                                                                                                                                   Altering gene transcription for treating disorders such as cancer, by exposing host cell transfected with composition having two constructs operably linked to promoter, to two different agents inducing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antigen presentation; vaccine; infectious disease; allergy; cancer; molecular scaffold; immune response; farm animal; organiser; hGH; immunostimulatory; cytostatic; antiallergy; human growth hormone; FOS leucine zipper; OmpA; outer membrane protein; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 10.2; DB 1; Length 15; Pred. No. 1.1e+03; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 9 A; 0 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                       Example 2; Fig 22; 116pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             standard; DNA; 15 BP.
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80.0%;
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98US-0110616P.
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Best Local Similarity 80.0%
....hes 12, Conservative
                                                                               5.5
                                                                               Collins
                                       (UYBO-) UNIV BOSTON.
                                                                                                                  WPI; 2000-412301/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Escherichia coli.
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                                                                                                                                                                                                                        transcription.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-NOV-1999;
  02-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-JUN-2000
                                                                               Gardner TS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA48271;
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99US-0142788P

08-JUL-1999;

schultz1-899.rng

which has improved target sequence specificity by containing one or more antisense sequence(s) to mRNA regions with reduced secondary structure, and improved targity against nuclease activity by having closed type construction. The products of the invention have cytostatic and immunosuppressive activity. (I) is stable to nuclease activity, shows a significant specificity to gene expression and has better antisense effect. One micro g each of non-specific control-phosphodiester oligo effect. One micro g each of non-specific control-phosphodiester oligo (liner 60 mer) and the CMAS-oligo were incubated with either raw human serum, FBS (fetal bovine serum) and calf serum or exonuclease III. As-oligo was completely digested after 24 hr incubation in the presence of serum. The closed-type CMAS-oligo was remained mostly intact after 24 hour incubation with raw human serum, FBS, and calf serum, exhibiting significantly improved stability than the linear one against nucleases

Sequence 15 BP; 1 A; 3 C; 2 G; 9 T; 0 U; 0 Other;

This invention describes a novel antisense oligonucleotide (oligo) (I)

Claim 5; Page 63; 66pp; English.

nucleases

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Antisense oligonucleotides comprising antisense sequences to mENA regions with reduced secondary structure to improve its target sequence specificity, and closed type construction to improve stability against
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secondary structure; cytostatic; immunosuppressive; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human c-myb CMAS primer SEQ ID NO 2.
                                                                                                                                                                 (CYTO-) CYTOS BIOTECHNOLOGY AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-APR-2000; 2000WO-KR000305.
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                                                                                                                                                                                                                                                                                                                           Hennecke F,
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 \begin{array}{c} \mathfrak{K} \times \mathfrak
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A new method for developing vaccines has been identified, in which a non-naturally occurring molecular scaffold, having a core particle and a determinantly attached organiser, is attached to an antigen or antigenic covalently attached organiser, is attached to an antigen or antigenic determinant. The scaffold and antigen or antigenic determinant interact to form an ordered and repetitive antigen array. The composition is useful as a vaccine against infections diseases, to induce immune responses in farm animals and also in the treatment of cancer and allergies. The human Growth Hormone, hGH, protein was used as the membrane protein, OmpA signal sequence which is a FOS leucine zipper protein domain. The FOS domain formed the antigen attachment site. The present sequence is E. coli ough gene fragment, comprising the ribosome binding site and 5'UTR. This sequence was used in the construction of the pAV vectors series. The pAV vectors were used to express the FOS fusion
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                                                                                                                                             Composition for use as vaccine against infectious diseases and in treatment of cancer and allergies comprises non-naturally occurring molecular scaffold and antigen or antigenic determinant.
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Bachmann M;
                                                                                                                                                                                                                                                                                                      Example 6; Page 47; 102pp; English.
Nieba L,
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Best Local Similarity 80.09
Watches 12; Conservative
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                                                                    WPI; 2000-412159/35
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                     Gaps
                                   .:
 14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Edmondson SR;
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                                                                                                                                                                      AAF48960 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                IGFBP3 oligonucleotide #2380.
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                                                           902 IGGICATTITCTITG 916
                                                                                          1 rdarcrrcrrrrg 15
                                                                                                                                                                                                                                     (first entry)
Query Match
Best Local Similarity 80.0
Matches 12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-041421/05.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       inflammation.
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                                                                                                                                                                                                      AAF48960;
                                                                                                                                         RESULT 617
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Example 7; Page 59; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBPB], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, planis, serbornhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperplasia warts in the inside of blood vessels or any other hyperplasia

Seguence 15 BP; 1 A; 1 C; 0 G; 13 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15; Best Local Similarity 80.0%; Pred. No. 1.1e+03; Matches 12; Conservative 0; Mismatches 3; Indels 0;

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Gaps

SULT 618

F52585/c AAF52585 standard; DNA; 15

BP.

AAF52585;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #3545.

Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant; virucide, ophthalmological; keloid; skin disorader; inaulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000

21-JUN-2000; 2000WO-AU000693.

(MURD-) MURDOCH CHILDRENS RES INST.

99US-0140345P.

21-JUN-1999;

Wraight CJ, Werther GA, Edmondson SR,

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WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 84; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
              inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
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                                                                                                                                                                                                                                                                                                                   Gaps
reducing growth factor mediated cell proliferation,
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                                                                                                                                                                                                                                                                            Length 15;
                                                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                                                                                                                                                   Sequence 15 BP; 7 A; 1 C; 7 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                          14.0%; Score 10.2; DB 1;
80.0%; Pred. No. 1.1e+03;
tive 0; Mismatches 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              neovascular condition of the retina; ss
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                                                                                                                                                                                                  vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
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                                                                                                                                                                                                                                                                                                                                                            919 CTTTGCCTTTTATCC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IGF-I oligonucleotide #4472.
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                                                                                                                                                                                                                                                                                                                                                                                             CTTTGCCTCCTTTCC 1
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                                                                                                                                                                                                                                                                                                                       12; Conservative
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                                                                                                                                                                                                                                                                                                   Sest Local Similarity
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                                                                                                                                                                                                                                                                                Query Match
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                                                                                                                                                                                                                                                                                                                         Matches
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F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor—mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 0 A; 8 C; 0 G; 7 T; 0 U; 0 Other;

3; Indels 14.0%; Score 10.2; DB 1; 80.0%; Pred. No. 1.1e+03; iive 0; Mismatches 3; 924 CCTTTATCCCTCCT 938 12; Conservative Local Similarity Query Match Matches

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Gaps

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Length 15;

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AAF50426 standard; DNA; 15 AAF50426; RESULT 620 AAF50426

30-MAR-2001 (first entry)

IGF-I oligonucleotide #1386.

Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scaleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition; the retina; ss.

Homo sapiens

WO200078341-A1

28-DEC-2000

21-JUN-2000; 2000WO-AU000693.

99US-0140345P. 21-JUN-1999;

(MURD-) MURDOCH CHILDRENS RES INST

Werther GA, Edmondson SR; Wraight CJ,

WPI; 2001-041421/05

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 69; 201pp; English.

The present invention relates to a method for ameliorating the effects of oligonuclectides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serbornhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, οŧ skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense

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                                                    Gaps
brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
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                                     14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03; Indels ive 0; Mismatches 3; Indels
                        Sequence 15 BP; 2 A; 5 C; 1 G; 7 T; 0 U; 0 Other
            vessels or any other hyperplasia
                                                                                                            ВР
                                                               933
                                                                                                                                               IGF-I oligonucleotide #1387.
                                                                           1 crriccrircaarce 15
                                                                                                          AAF50427 standard; DNA; 15
                                                                                                                                    (first entry)
                                           Local Similarity 80.0
mes 12; Conservative
                                                               919 CTTTGCCTTTTATCC
                                                                                                                                   30-MAR-2001
                                                                                                                       AAF50427;
                                     Query Match
                                                                                             RESULT 621
                                                  Matches
                                                                                                     AAF50427
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cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriaasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell prollferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss. Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

99US-0140345P. 21-JUN-1999;

(MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR;

Wraight CJ, Werther GA,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 70; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGFP]-1 receptor, IGF binding protein [IGFPP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense of psoriasis, oligonucleotide which can be used to design the effects of psoriasis, 19150nucleotide which as useful for ameliorating the effects of psoriasis, inhibiting the capable of psoriasis, inhibiting the capable of psoriasis, inhibiting the oligonucleotide which are not plants, selected of the skin, a hypernovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood

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Indels

. G

Mismatches

; 0

12; Conservative

Matches

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.;
0
                                                              Gaps
                                                              ;
0
                               14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03;
                                                            3; Indels
Sequence 15 BP; 2 A; 5 C; 1 G; 7 T; 0 U; 0 Other;
                                                              0; Mismatches
                                                                                                                                                                                                         AAF53501 standard; DNA; 15 BP
                                                                                             920 TITGCCTITIAICCC 934
                                                                                                                            rrrgcrrrcaarccc 15
                                                                                                                                                                                                                                                                                                    IGF-I oligonucleotide #4461
                                                                                                                                                                                                                                                                     (first entry)
                                                               12; Conservative
                                             Similarity
                                                                                                                                                                                                                                                                     30-MAR-2001
                               Query Match
Best Local S:
Matches 12
                                                                                                                                                                                                                                        AAF53501;
                                                                                                                                                                             SULT 622
                                                                                                                                                                                             F53501
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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityrlashs; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss Edmondson SR; (MURD-) MURDOCH CHILDRENS RES INST 21-JUN-2000; 2000WO-AU000693 99US-0140345P Wraight CJ,' Werther GA, WPI; 2001-041421/05. WO200078341-A1 Homo sapiens. 21-JUN-1999; 28-DEC-2000,

Example 8; Page 90; 201pp; English.

inflammation

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide. (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, coptunestalisas, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 0 A; 7 C; 1 G; 7 T; 0 U; 0 Other;

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Score 10.2; DB 1; Length 15; Pred. No. 1.1e+03;
 14.0%;
  Query Match
Best Local Similarity
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902 IGGICATITICITIG 916

à

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligomucleotide, (for Insulin-like Growth Factor [IGR]-1 creceptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, collgomucleotide which can be used to design the antisense oligomucleotides of the present invention (see AAF4151 and AAP45153-CF F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, continuation skin, growth factor-mediated malignancies, other scheric brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
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                                                                                                                                                                                                                                                                      Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; shin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein; IGFBP-2; IGFBP3; inflammation; psoriasis; pitatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis, kidney disease; neobascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 8 A; 3 C; 1 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 7; Page 48; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      vessels or any other hyperplasia
                                                                                                                               AAF47198 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-JUN-2000; 2000WO-AU000693.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-0140345P.
935
                                     15
                                                                                                                                                                                                                                            IGFBP3 oligonucleotide #618.
                                                                                                                                                                                                       30-MAR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wraight CJ, Werther GA,
 921 TTGCCTTTTATCCCT
                                     1 rrcccrerrcrcccr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-041421/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200078341-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-DEC-2000.
                                                                                                                                                                    AAF47198;
                                                                                               RESULT 623
                                                                                                             AAF47198/
ID AAF4
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                                     셤
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(first entry)

AAF48478

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Antisense therapy; antiprolliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell prolliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; scleroderma; wart; skin cancer; sclerotic disease; neovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
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                                                                                                                                                                                                                                                                                                                                                                                                             (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                        IGFBP3 oligonucleotide #1899.
                                                                                                                                                                                                                                                                                                                                                           21-JUN-2000; 2000WO-AU000693
                                                             AAF48479 standard; DNA; 15
15 TGATGATTATCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                     Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-041421/05.
                                                                                                                                                                                                                                                                                                          WO200078341-A1.
                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                    21-JUN-1999;
                                                                                                               30-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                      Wraight CJ,
                                                                                                                                                                                                                                                                                                                                  28-DEC-2000
                                                                                     AAF48479;
                                    RESULT 624
                                                 AF48479
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99US-0140345P

Edmondson SR;

ð 셤 The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, nebthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood ö Gaps ; 0 14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03; ive 0; Mismatches 3; Indels Sequence 15 BP; 2 A; 5 C; 0 G; 8 T; 0 U; 0 Other; vessels or any other hyperplasia 927 ITTAICCITCTT 941 Trcarcreter 15 12; Conservative Local Similarity Query Match Matches

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0; Mismatches
                                                                                                                               BP.
                                     926 TITTATCCTCTCT 940
                                                               1 Trrcarcrcrcarcr 15
                                                                                                                             AAF51294 standard; DNA; 15
             12; Conservative
Local Similarity
                                                                                                                                                      AAF51294;
                                                                                                   RESULT 626
AAF51294/C
ID AAF512:
XX
AC AAF512:
            Matches
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RESULT 625

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like GFOWH Factor [IGP]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing prowth factor mediated cell proliferation, colligonuclectide which can be used to design the antisense oligonuclectide which can be used to design the antisense oligonuclectide which can be used to design the antisense oligonuclectide with can be used to mention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, chichyosis, pityriasis, ruba, pilaris, serbornhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic condition of the inside of blood
                                                                                                                                                      Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic; dermatological; cardiant; virucide, ophthalmological; keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein, IGFBP-2; IGFBP3, inflammation, psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serbornhoea; ruba; keratosis; neoplasia; scleroderma; wart, skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 2 A; 5 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14.0%; Score 10.2; DB 1; 80.0%; Pred. No. 1.1e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 7; Page 56; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         vessels or any other hyperplasia
AAF48478 standard; DNA; 15 BP
                                                                                                                      IGFBP3 oligonucleotide #1898.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-0140345P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-JUN-2000; 2000WO-AU000693.
                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wraight CJ, Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-041421/05.
                                                                                                                                                                                                                                                                                                                                                                                       WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       inflammation,
                                                                              30-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                               28-DEC-2000.
                                      AAF48478;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
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30-MAR-2001

WO200078341-A1 Homo sapiens.

28-DEC-2000.

21-JUN-1999;

Wraight CJ,

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Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
        Antisense therapy; antiproliferative; antinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFB-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neoblasia; scherotic sclerotic disease; neovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor (IGF)-1 receptor, IGF binding protein [IGFNP]-2 or IGFNP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborkhea, keloids, keratosis, hyperneovascular conditions uch as a neovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wraight CJ, Werther GA, Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 8; Page 67; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-0140345P.
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                   WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-JUN-1999;
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                                                                                                                                                                                                                                                                                                                                                                       28-DEC-2000,
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                                                                                                                                                                                                                                                                    Homo
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셤
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oilgonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the effects of psoriasis, eighthyosis, pityriasis, ruba, planis, serborrhoea, keloids, keratosis, neoplasias, seleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other selerotic disease, kidney disease, hyperpooliferation of the inside of blood
                                                                                                                                                    cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                   antiproliferative; antiinflammatory; antipsoriatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 8; Page 75; 201pp; English.
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                                                                                     IGF-I oligonucleotide #2254.
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Gaps

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30-MAR-2001

AAF50092;

OKUKEKE

15

ESULT 627

AF50092,

Query Match

Best Loc Matches

schultz1-899.rng

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IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasia; kidney disease; neovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                          Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                       (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                    Example 7; Page 59; 201pp; English.
                                                                                                                                         21-JUN-2000; 2000WO-AU000693
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                                                                                                                                                                                                                                     WPI; 2001-041421/05
                                                                                             WO200078341-A1
                                                                       Homo sapiens.
                                                                                                                                                                 21-JUN-1999;
                                                                                                                                                                                                                                                                                              inflammation.
                                                                                                                                                                                                               Wraight CJ,
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Edmondson SR;

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, [IGF] binding protein [IGFB]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or ther disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAF45151 and AAF45153-154561). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia Sequence 15 BP; 3 A; 1 C; 0 G; 11 T; 0 U; 0 Other;

14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03; Live 0; Mismatches 3; Indels 938 TCTTCATTGGTTTAA 952 |||| ||| ||| TCTTTATTTTTAA 15 Query Match
Best Local Similarity 80.03
Matches 12; Conservative

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RESULT 629

AAF49077 standard; DNA; 15 BP

RESULT 630

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Gaps

0;

AAF49077

(first entry)

30-MAR-2001

AAF49077;

IGF-I oligonucleotide #37.

IGF-I oligonucleotide #4473 AAF53513 standard; DNA; 15 30-MAR-2001 (first entry) AAF53513; AAF53513 Ü

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFB-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease;

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stin disorders. The method comprises contacting the skin with an anticontent of the skin with an anticontent of the skin with an anticontent of the skin with a capable of anticonse oligonucleotide. (for Insulin-like Growth Factor [IGF]-1 inhibiting or reducing prowth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide of the present invention (see AAF4151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hypermorascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                 Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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0; Mismatches 3; Indels
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neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                         Edmondson SR;
                                                                                                                                                                                                                                              (MURD-) MURDOCH CHILDRENS RES INST,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 8; Page 90; 201pp; English.
                                                                                                                                                               21-JUN-2000; 2000WO-AU000693.
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Les 12; Conservative
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                                                                                 WO200078341-A1
                                                                                                                                                                                                        21-JUN-1999;
                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                   inflammation.
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Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor. I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Wraight CJ,

(MURD-) MURDOCH CHILDRENS RES INST

99US-0140345P.

21-JUN-1999;

21-JUN-2000; 2000WO-AU000693.

WO200078341-A1

28-DEC-2000

Example 8; Page 61; 201pp; English.

inflammation.

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skin disorders. Interacts to a merutour tot must the effects of articles of articles of articles. The method comprises contacting the skin with an artislense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBF]-2 or IGFBF], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense of insulin-limpation (see AAF45151 and AAF45153-6150nucleotide which can be used to assign the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, ichthyosis, growth factor-mediated malignancies of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic
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                                                                                                                                                                                                                                                               Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to a method for ameliorating the effects of
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                                                                                                                                                             Edmondson SR;
                                                                                                       (MURD-) MURDOCH CHILDRENS RES INST.
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21-JUN-2000; 2000WO-AU000693.
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                                                                                                                                                                Wraight CJ, Werther GA,
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                                                      21-JUN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                        Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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vessels or any other hyperplasia

939 CTICATIGGTTTAAT 953

Local Similarity ov... Similarity

Query Match Best Local

Matches

crrcarrccrrrrar 1

15

IGFBP3 oligonucleotide #1043.

WO200078341-A1.

28-DEC-2000

Homo sapiens

(first entry)

30-MAR-2001

AAF47623;

AAF47623 standard; DNA; 15

SSULT 631

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Gaps

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ABX04014 standard; DNA; 15
                                                           Wraight CJ, Werther GA,
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Best Local Similarity 80.0
Matches 12; Conservative
                                                                                                                       WPI; 2001-041421/05
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                                                                                                                                                                                                                                                                        inflammation.
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diagnosis of oral diseases, particularly paradontitis, but also caries, especially to identify genetic predisposition (as indicated by oblymorphisms) to disease and to identify causative microorganisms or their associated virulence factors and antibiotic resistance genes, e.g. for selection of therapy and for prognosis. They are also useful for research into oral infections. The carriers allow simultaneous detection of both host and pathogen parameters, providing quickly and simply an individual's paradontitis profile, including detection of pathogens that aggravation of diabetic symptoms, and of opportunistic pathogens.

ABK01370-ABK044044 represent DNA fragments used to illustrate the method
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vaccine; molecular scaffold; pilus; pilin; HBCAg; antigen; hepatitis B virus capsid protein; JUN; FOS; HIV gp140; measles virus N protein; bee venom phospholipaes; Th type 2 T-helper; Th2; Sinbis virus E2 protein; amyloid beta; influenza M2 antigen; human immunodeficiency virus infection; viral hepatitis; measles; chicken pox; pneumonia; tuberculosis; syphilis; malaria; allergy; cancer; ompA ribosome binding site.
                                                           invention describes a novel nucleotide carrier with probes used for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New composition, useful for vaccine production, comprises antigen or antigenic determinant and non-natural molecular scaffold comprising organizer and core particle such as bacterial pilus or pilin protein.
                                                                                                                                                                                                                                                                                                                                                                                                               14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03; Live 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B. coli OmpA strong ribosome binding site.
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               Claim 10; Page 29; 58pp; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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Matches 12; Conserv
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DUNANT N.
BACHMANN M.
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                                                                                                                                                                                                                                                                                                                           of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Escherichia coli
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(TISS/)
(LECH/)
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(DUNA/)
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                                                           This
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                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB]-2 or IGFBP3), which is capable of inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAF45151 and AAF45153- 10fHVpoiss, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, noplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic verses warsh was a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic verses and verses!
                                                                                                                         Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Detection; probe; diagnosis; oral disease; paradontitis; caries; therapy; polymorphism; virulence factor; antibiotic resistance gene; prognosis; oral infection; detection; pathogen; coronary heart disease; diabetic symptom; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide array, useful for diagnosing oral diseases, particularly paradontitis, carries human or microbial reference sequences.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14.0%; Score 10.2; DB 1; Length 1:
80.0%; Pred. No. 1.1e+03;
Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 7 A; 1 C; 7 G; 0 T; 0 U; 0 Other;
                                               Edmondson SR;
(MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                           Example 8; Page 75; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Resistance gene ermTR DNA fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP
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13-MAR-2001; 2001DE-02010013.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        931 TCCCTCCTCTTCATT 945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-MAR-2001; 2001DE-02010013.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTCTCCGCTTCCTT 1
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0

Gaps

; 0

WPI; 2002-627351/67.

The invention relates to a composition comprising: (a) a non-natural molecular scaffold (molecular scaffold) which comprises a core particle such as a bacterial pilus or pilin protein, a recombinant form of the protein, a virus-like particle or a hepatitis B virus capsid protein, (HBCAG), and an organiser; and (b) an antigen or antigenic determinant, where the molecular scaffold and antigen or antigenic determinant include JUN, FOS, HIV GPL40, measles virus N protein, bee venom phospholipase, Sinbis virus E2 protein, amyloid beta derived peptides and influenza M2 antigen. The composition (or vaccine) is useful for immunisation, by administration to a subject, where the administration produces an immune response, such as humoral, cellular or protective immune response, preferably a Th type 2 T-helper (Th2) response that is specific for the antigenic determinant. The administration induces antibodies specific for the antigenic determinant of a subtype corresponding to the Th2 subtype in the subject. The subtype of the is specific for pilus or pilin polypeptide or antigenic determinant. The composition is useful for the production of antigenic determinant. The composition is useful for the production of vaccines for prevention of infectious diseases such as human tesponse, such as arthritis, colitis, measles such as human choneciclency virus, viral hepatitis, measles, thicken pox, pneumonia, tuberculosis, syphilis, malaria, and for treating allergy, cancer, and chronic diseases induced or accelerated by a Th1 type immune responses of the Th2 type and allows the creation of highly efficient vaccines against infectious diseases, and for treating allery, cancer, and allergy, cancer, and chronic diseases induced or accelerated by a Th1 type immune response. The present sequence is an OmbA ribosome binding type immune response. The present sequent is an OmpA ribosome binding site incorporated into vectors expressing compositions of the invention

14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03; Indels Sequence 15 BP; 8 A; 1 C; 5 G; 1 T; 0 U; 0 Other; 0; Mismatches 12; Conservative Query Match Best Local Similarity Matches 12; Conserv

0

Gaps

. 0

ABS70925 standard; DNA; 15 BP. (first entry) 10-DEC-2002 ABS70925; SOLT 635 370925/c

Molecular antigen array associated DNA sequence #13.

Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory; cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array; vaccine; infectious disease; ds.

Unidentified

WO200256905-A2.

25-JUL-2002

19-UAN-2001; 2001US-0262379P. 04-MAY-2001; 2001US-0288549P. 05-OCT-2001; 2001US-0326998P. 07-NOV-2001; 2001US-0331045P. 21-JAN-2002; 2002WO-IB000166.

(CYTO-) CYTOS BIOTECHNOLOGY AG

Sebbel P; Lechner F, Bachmann M, Tissot A, Maurer P, Renner WA, Piossek C;

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This invention relates to a novel ordered and repetitive antigen array consists in the production of vaccines for infectious diseases. The invention used in the production of vaccines for infectious diseases. The invention also discloses a composition comprising a non-natural molecular scaffold comparising a core particle selected from a norganiser comprising at least one first attachment site, where the organiser is comnected to the core particle by at least one first of accountance of a least one second attachment antigen or antigen and where the antigen or antigen and where the antigen or antigen or antigen and where the antigen or antigen and an area or antigen or antigen and an antigen and an antigen and antigen and antigen and antigen and antigen and an antigen and and antigen and antigen and and antigen and and antigen and antigen and antigen and antigen or antigen or ant
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                                         Molecular antigen array used in the production of vaccines for infectious
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                                                                                                                                                        Disclosure; Page 311; 441pp; English
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Best Local Similarity 80.03
Matches 12; Conservative
                                                                                                        diseases
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ABL59135 standard; DNA; 15 BP. (first entry) 15 CGTTTTTACCTCT (revised) 07-AUG-2003 07-OCT-2002 ABL59135; RESULT 636 ABL59135 g à

Long terminal repeat; LTR; ALSV; lung cancer; ALSV-induced cancer; PCR; PCR primer A-Au for a fragment of the LTR of ALSV. 07-JAN-2000; 2000US-00479770. 99US-0115087P. Avian leukosis virus. US6391555-B1. 07-JAN-1999; 21-MAY-2002. primer; ss.

(JOHN/) JOHNSON E S. WPI; 2002-478534/51. Johnson ES;

schultz1-899.rng

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Detecting avian leucosis/sarcoma virus (ALSV) nucleic acids, particularly long terminal repeats, in a DNA sample from a patient indicates that the patient has, or is likely to develop ALSV-induced lung cancer.
                                                                     PCR primers ABL59134-35 were used to amplify a fragment from a conserved region of the long terminal repeat (LTR) of avian leucosis/sarcoma virus (ALSV). The primers were used to screen for an increased potential for developing ALSV-induced lung cancer. The method comprises detecting ALSV nucleic acid sequences in DNA from a sample from the patient. The method is useful for the detection of ALSV-induced cancer. (Updated on 07-AUG-
                                                                                                                                                                                                                                                                                                                                                                                                                                          Long terminal repeat; LTR; ALSV; lung cancer; ALSV-induced cancer; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                  PCR primer A-Auj for a fragment of the LTR of ALSV.
                                                                                                                                                                      Sequence 15 BP; 2 A; 6 C; 2 G; 5 T; 0 U; 0 Other;
                                              Claim 20; Col 9; 25pp; English.
                                                                                                                                                                                                                                             930 ATCCCTCCTCTTCAT 944
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                                                                                                                                              2003 to correct OS field.)
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                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                   (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Avian leukosis virus.
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hes 12; Conser
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                                                                                                                                                                                                                                                                                                        RESULT 637
                                                                                                                                                                                                                      Matches
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 8
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Gaps

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14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03; ive 0; Mismatches 3; Indels

Detecting avian leucosis/sarcoma virus (ALSV) nucleic acids, particularly long terminal repeats, in a DNA sample from a patient indicates that the patient has, or is likely to develop ALSV-induced lung cancer. WPI; 2002-478534/51

(JOHN/) JOHNSON E

Johnson ES;

Claim 20; Col 9; 25pp; English.

PCR primers ABL59136-37 were used to amplify a fragment from a conserved region of the long terminal repeat (LTR) of avian leucosis/sarcoma virus (ALSV). The primers were used to screen for an increased potential for developing ALSV-induced lung cancer. The method comprises detecting ALSV nucleic acid sequences in DNA from a sample from the patient. The method is useful for the detection of ALSV-induced cancer. (Updated on 07-AUG-2003 to correct OS field.)

Sequence 15 BP; 3 A; 6 C; 2 G; 4 T; 0 U; 0 Other;

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14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03;
Query Match
Best Local Similarity
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0
                                                                                                                                                                                                                                                                       Molecular antigen array; vaccine; ss; primer; antimicrobial; molecular scaffold; amyloid beta; Abeta 1-42; influenza; graft versus host disease; IgE-mediated allergic reaction; anaphylaxis; adult respiratory distress syndrome; ARDS; Crohn's disease; allergic asthma; acute lympholastic leukaemia; non-Hödgkin's lymphoma; farave's disease; systemic lupus erythematosus; osteoporosis; inflammatory immune disease; myasthenia gravis; multiple sclerosis; immunoproliferative disease; lymphadenopathy; Alzheimer's disease; angioimmunoblastive lymphadenopathy; immunoblastive lymphadenopathy; rheumatoid arthritis; diabetes; infectious disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Molecular antigen array used in the production of vaccines for infectious
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a composition comprising: (a) a non-natural molecular scaffold comprising: (i) a core particle selected from: (i) a core particle of a non-natural origin; and (2) a core particle of natural origin; and (ii) an organiser comprising at least one first attachment site, where the organiser is connected to the core particle by at least one covalent bond; (b) an antigen or antigenic determinant with at least one second attachment site, where the antigen or antigenic determinant is anyloid beta peptide (Abeta 1-42) or its fragment, and where the second attachment site is selected from: (i) an attachment site not naturally attachment site naturally occurring with the antigen or antigenic determinant, and (ii) an attachment site naturally occurring with the antigen or antigenic determinant, where the second attachment site is capable of association through at least one non-peptide bond to the first attachment site; and
          Gaps
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                                                                                                                                                                                                                                         Molecular antigen array related modified ribosome binding site.
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Piossek C;
        Indels
        3;
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Sebbel P,
      Mismatches
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NOVARTIS PHARMA AG.
MAUNER P.
LECHNER F.
ORTMANN R.
                                                                                                                                            ABS66351 standard; DNA; 15 BP
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04-MAY-2001; 2001US-0288549P.
05-OCT-2001; 2001US-0326998P.
                                    944
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-NOV-2001; 2001US-0331045P
                                                                                                                                                                                                              (first entry)
 12; Conservative
                                 930 ATCCCTCCTCTTCAT
                                                               1 AGCCATCCGCTTCAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STAUFENBIEL M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lechner F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-636514/68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200256907-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FREY P.
                                                                                                                                                                                                            29-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-JUL_2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Maurer P, I
Renner WA,
                                                                                                                                                                            ABS66351;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (LUEO/)
(STAU/)
(FREY/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CXIO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (NOVS )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (LECH/)
                                                                                                                RESULT 638
Matches
                                                                                                                                 ABS66351
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angioimmunoproliferative lymphadenopathy, immunoblastive lymphadenopathy, rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease, osteoporosis and infectious diseases. The present sequence is a Molecular antigen array related DNA sequence which is included in the sequence where the antigen or antigenic determinant and the scaffold interact through the association to form an ordered and repetitive antigen array. Also included is a process for producing a non-naturally occurring ordered and repetitive antigen array. The composition is used in immunisation and as a vaccine for diseases such as influenza, graft versus host disease, Igd-mediated allergic reactions, anaphylaxis, adult respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma, acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease, systemic lupus erythematosus, inflammatory immune diseases, myasthenia gravis, immunopoliferative disease lymphadenopathy. antigenic determinant and the scaffold interact listing but is not mentioned anywhere else in the specification

Sequence 15 BP; 8 A; 1 C; 5 G; 1 T; 0 U; 0 Other;

ö Gaps 0; 14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03; ive 0; Mismatches 3; Indels 12; Conservative Similarity Query Match Best Local S Matches 12

ABL42623 standard; DNA; 15 BP SULT 639 :L42623

ABL42623;

Hairpin beacon target hybridisation oligonucleotide #2.

(first entry)

11-APR-2002

Hybridisation; thermodynamic; computer readable storage medium; probe; target; molecular beacon; duplex; hairpin; ss.

Synthetic.

WO200194611-A2.

13-DEC-2001

07-JUN-2001; 2001WO-US018424.

07-JUN-2000; 2000US-0209778P.

(UYWA-) UNIV WAYNE STATE.

Peyret N; Santalucia J,

WPI; 2002-122125/16.

Predicting nucleic acid hybridization thermodynamics based on hybridization information, thermodynamic parameter, correction first set of data which represents hybridization conditions.

data and

Disclosure; Fig 8; 100pp; English.

The present invention describes a method for predicting nucleic acid hybridisation thermodynamics (HT) comprising providing a database of thermodynamic parameters (TP), receiving providing action information which represents a sequence, receiving correction data, and a first set of data which represents hybridisation conditions, and calculating HT including net HT based on the hybridisation information, TP, the correction data and the first set of data. Also described are: (I) a computer-readable storage medium having stored in it, a database of FP and a computer program which executes the above method, and (2) a system for predicting nucleic acid HT, comprising a database of TP, units for receiving hybridisation information which represents at least one sequence and for

ô receiving correction data, receiving a first set of data which represents hybridisation conditions and unit for calculating HT. The method and system are useful to optimise and predict probe-target hybridisation. The method and system takes into account of single strand folding thermodynamics to calculate effective hybridisation thermodynamics not taken into account by prior art methods. ABL42498 to ABL4265 represent oligonucleotide sequences which are used in the exemplification of the Predicting nucleic acid hybridization thermodynamics based on hybridization information, thermodynamic parameter, correction data and first set of data which represents hybridization conditions. Hybridisation; thermodynamic; computer readable storage medium; probe; target; molecular beacon; duplex; hairpin; ss. Gaps . 0 14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03; ive 0; Mismatches 3; Indels Sequence 15 BP; 0 A; 0 C; 4 G; 11 T; 0 U; 0 Other; Duplex sequence module 1 oligonucleotide #2. BP. 07-JUN-2001; 2001WO-US018424. 07-JUN-2000; 2000US-0209778P. 917 ilarity 80.0%; Conservative 1 gdrrrrrrrrrrigg 15 ABL42606 standard; DNA; 15 11-APR-2002 (first entry) (UYWA-) UNIV WAYNE STATE. Santalucia J, Peyret N; 903 GGTCATTTTCTTTGG WPI; 2002-122125/16. Query Match Best Local Similarity Matches 12; Conserv present invention WO200194611-A2. 13-DEC-2001. Synthetic. ABL42606; RESULT 640 **ABL42606** 88888888888888 임

The present invention describes a method for predicting nucleic acid (The present invention describes a method for predicting a database of thermodynamic parameters (TP), receiving hybridisation information which represents a sequence, receiving occrection data, and a first set of data content of the first set of data also described are: (1) a conjuter-readable of the first set of data. Also described are: (1) a computer-readable content maying stored in it, a database of TP and a computer program which executes the above method, and (2) a system for predicting nucleic acid HT, comprising a database of TP, units for receiving correction data, receiving a first set of data which represents contrains and which represents at least one sequence and for hybridisation information which represents at least one sequence and for receiving correction data, receiving a first set of data which represents complicities and unit for calculating HT. The method and system takes into account of single strand folding and continuation of the methods and continual account by prior at methods: ABL4198 to ABL45626 represent claken into account are methods: ABL4198 to ABL4565 represent claken into account are methods: ABL4198 to ABL4565 represent claken into account by prior are used in the exemplification of the

Disclosure; Fig 2a; 100pp; English.

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Gaps

.; 0

Score 10.2; DB 1; Length 15; Pred. No. 1.1e+03; 0; Mismatches 3; Indels

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14.0%; 80.0%;

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The present sequence is that of the strong ribosome binding site and 5' untranslated region of the Escherichia coli ompA gene. The sequence was used in a pAV vector series (see ABA91821-25) for expression of FOS fusion proteins in E. coli. The invention is based on the discovery that a polypeptide that includes the GHI and/or CH4 domain(s) of an IgE includes the GHI and/or CH4 domain(s) of an IgE induce self-specific anti-IgE antibodies in a mammal that reduce or eliminate the pool of free IgE in the mammal's serum. Claimed compositions comprising a carrier joined to the IgE derived polypeptide, or a polynucleotide encoding the fusion protein, are used to inhibit or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Composition for treating immunoglobulin (Ig) E-mediated disorder such as anaphylactic shock, allergic rhinitis and conjunctivitis, comprises a polypeptide that includes CH1 and/or CH4 domains of IgE molecule coupled
                                                                                                                                                                                                                                                                                                                                                                Ribosome binding site; RBS; ompA gene; IgE; immunoglobulin E; allergy; asthma; eczema; urticaria; anaphylactic shock; allergic rhinitis; conjunctivitis; antianaphylactic; immunosuppressive; antiallergic; antiantlammatciy; dermatological; vasciropic; ophthalmological; vaccine; therapy; ds.
                             Sequence 15 BP; 0 A; 0 C; 4 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                  Escherichia coli ompA gene ribosome binding site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example; Page 38; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BIOTECHNOLOGY AG
                                                                                                                             903 GGTCATTTTCTTTGG 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-JUL-2001; 2001WO-IB001353.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-JUL-2000; 2000US-0221841P.
                                                                                                                                                           1 GGTTTTTTTTTGG 15
                                                                                                                                                                                                                                      ABA91820 standard; DNA; 15
                                                                                                                                                                                                                                                                                                    15-MAY-2002 (first entry)
                                                         Query Match
Best Local Similarity 80.0°
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Renner WA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BACHMANN M F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-227076/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RENN/) RENNER W A.
   present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200209751-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CYTO-) CYTOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   to a carrier.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-FEB-2002
                                                                                                                                                                                                                                                                     ABA91820;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BACH/)
                                                                                                                                                                                                         RESULT 641
ABA91820/c
망됐었
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The invention relates to an isolated polynucleotide comprising a sequence selected from a polymorphic variant of calmodulin I (CALMA). The polymorphic variant comprises an CALMA isogene defined by a haplotype colymorphic variant comprises an CALMA isogene defined by a haplotype selected from haplotypes 1-21 given in the specification. The colymorphisms are useful for studying the biological function of CALMA as well as in identifying drugs targeting this protein for the treatment of a disorder related to its abnormal expression or function. The polymorphic variants may also be used in screening for compounds cargeting calma to treat a specific condition or disease predicted to be associated with CALMA activity. Establishing CALMA haplotype or haplotype cargeting the individual is useful for improving the efficiency and containing its associated with SCYA3 activity, e.g. Alzheimer's containing liseases associated with SCYA3 activity, e.g. Alzheimer's chiesase and diseases involving defects in calcium-dependent signal contained the design of clinical trials of candidate drugs for treating a specific condition or disease predicted to be associated with CALMA as arrivity and arrivity arranged him a privited with CALMA. ö . 0 Gaps New calmodulin-1 (CALM-1) isogene polymorphic variants, useful in expressing CALM1 protein for use in screening for candidate drugs to treat diseases related to CALM1 activity such as Alzheimer's disease. Gaps human CALM1 allele- specific Calmodulin 1; CALM1; human; single nucleotide polymorphism; SNP; haplotyping; SCYA3; Alzheimer's disease; drug screening; calcium-dependent signal transduction; PCR primer; ss. 0; 0; Indels Stephens JC; Human CALM1 gene allele-specific oligonucleotide #64. 3, Sequence 15 BP; 1 A; 2 C; 0 G; 11 T; 0 U; 1 Other; oligonucleotides and PCR primers of the invention Choi JY, Koshy B, Mismatches Claim 15; Page 13; 82pp; English. 0; 93B (GENA-) GENAISSANCE PHARM INC. 09-APR-2001; 2001WO-US011509. 2-APR-2000; 2000US-0196340P. AAS95955 standard; DNA; 15 908 TITICITIGGICTIT 922 (first entry) 924 CCTTTTATCCCTCCT 15 cGriririnaccicci 12; Conservative Chew A, 12; Conservative WPI; 2002-049190/06. Query Match Best Local Similarity Matches 12; Consery WO200179218-A2 Bentivegna SC, Homo sapiens. 26-FEB-2002 25-OCT-2001. AAS95955; RESULT 642 Matches AAS95955 g à

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prevent IgE-mediated disorders such as anaphylactic shock, allergic rhinitis or conjunctivitis, an allergic reaction to an allergen such aut or food, an asthmatic reaction, eczema or urticaria (all claimed)

14.0%; Score 10.2; DB 1; Length 15; 80.0%; Pred. No. 1.1e+03;

Best Local Similarity

Query Match

Sequence 15 BP; 8 A; 1 C; 5 G; 1 T; 0 U; 0 Other;

|||||||||| 1 TTTCTTTATTCTRT

(first entry)

24-SEP-2003

ULT 643

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Nucleic acid molecule, Hepatitis C virus; HCV; Hepatitis B virus; HBV;
HBV enzymatic nucleic acid substrate sequence #90.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MORR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention discloses a method for identifying a candidate polymorphic repeat within a coding sequence (expressed sequence tag, EST), which comprises detecting tandem repeats in a target coding sequence, scoring the repeats for polymorphic probability and generating a dataset correlating the repeats with polymorphic probability to identify a candidate polymorphic repeat. The computational methods (polymorphic useful for identifying and detecting candidate polymorphic repeats in useful for identifying and detecting candidate polymorphic repeats in human genes, which can be used to understand, treat or a eliminate genetic diseases, predispositions or adverse drug-treatment reactions. Examples of diseases linked to nucleotide repeats are Machado-Joseph, Haw River syndrome, Huntington's disease, fragile-X syndrome, Fredreich's ataxis, myotonic dystrophy, hyperandrogenaemia, spinal and bulbar atrophy and spinocerebellar ataxia. The sequences presented in ABX79676-ABX80022 are the polymorphic repeats identified for a search of human ESTs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Identifying a candidate polymorphic repeat within a coding sequence, funderstanding or treating genetic disease, comprises detecting tandem repeats in a target coding sequence and scoring the repeats for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                          polymorphic repeat; tandem repeat;
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                                                                                                                                                                                                                                                                                                                      EST; expressed sequence tag; ss; polymorphic repeat; tandem reppolymorphic marker prediction of ubiquitous simple sequences; Rep-X; human; genetic disease; drug-treatment; Machado-Joseph; Haw River syndrome; Huntington's disease; fragile-X syndrome; Fredreich's ataxis; myotonic dystrophy; hyperandrogenaemia; spinal atrophy; bulbar atrophy; spinocerebellar ataxia.
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                                                                                                                                                                                                                                                      EST polymorphic DNA repeat polynucleotide #254.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example; Col 1091; 588pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Garner HR, Wren JD, Minna JD,
                                         ABX79929 standard; cDNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-00475947.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (TEXA ) UNIV TEXAS SYSTEM.
                                                                                                                                                                                             entry)
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                                                                                                                                                                                         (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US6472154-B1
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                                                                                                                                                                                         17-APR-2003
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                                                                                                                     ABX79929;
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BP.

ACD56201 standard; RNA; 15

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CD56201 ESULT

ACD56201;

928 TIAICCCICCICTIC 942

12; Conservative

Matches

15 ricircircircirci

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The present invention relates to nucleic acid molecules which modulate to synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes. BNAzymes, anderzymes, amberzymes, anderzymes, anderzymes, anderzymes and synthese. NISO disclosed inozymes, zinzymes, anderzymes, and aptamers that bind to HBV reverse transcriptase end/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV ORDA. The nucleic acids may be used to modulate the expression of HBV CC genes and HBV viral replication. Also disclosed is a method for screening cc compounds and/or potential therapies directed against HBV, and compounds ct that modulate the expression and/or replication of HCV. The compounds and CC methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocallular carcinoma. The present sequence represents a substrate for one of the HBV enzymatic nucleic acid sequences disclosed in the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                      RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; decaver ribozyme; BNAzyme; decoy molecule; aptamer; degenerative; disease; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 2 A; 5 C; 1 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen J, Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 214; 387pp; English.
                                                                                                                                                                                                                                                                                                                                                                                  26-MAR-2001; 2001US-00817879.
08-UIN-2001; 2001US-00877478.
08-UIN-2001; 2001US-0296876P.
24-CCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
                                                                                                                                                                                                                                                                                                                                                 26-MAR-2002; 2002WO-US009187.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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Roberts E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MCSWIGGEN J. MORRISSEY D.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-229207/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLATT L.
MACEJAK D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ROBERTS E.
                                                                                                                                                                                                                                               Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAVCO P.
LEE P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DRAPER K.
                                                                                                                                                                                                                                                                                  WO200281494-A1.
                                                                                                                                                                                                                                                                                                                     17-0CT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Blatt L, Me
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    infection.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (DRAP/)
(ROBE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (PAVC/)
(LEEP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MACE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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cytomegalovirus;

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The sequences (AAQ52891-Q52922) are pref. influenza virus target sequences for enzymatic RNA molecules. The RNA molecules are complementary to a substrate binding region in the specified gene target. They also have enzymatic activity, in that they specifically cleave RNA have anti-viral properties. They can be used to attenuate viruses to be used in vaccines. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Enzymatic RNA molecules - used to inhibit viral replication, infection
                           vector; immune response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Macejak DG,
       T-cell leukaemia virus; hepatitis C virus; HCV; influenza virus; HSV; herpes simplex virus; vectantibody; ribozyme; viral RNA; treatment; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13.7%; Score 10; DB 1; Ler
40.0%; Pred. No. 8.9e+02;
....marches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 5; Fig 14; 287pp; English.
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92US-00882824.
92US-00882886.
92US-00882886.
92US-00882889.
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92US-008B3823.
92US-008B3849.
92US-008B4073.
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92US-00884333.
92US-00884422.
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92US-00923738.
92US-00935854.
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92US-00884436.
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92US-00948359
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Best Local Similarity
                                                                                  W09323569-A1
                                                                                                                                    29-APR-1993;
                                                                                                                                                                                               14-MAY-1992;
14-MAY-1992;
14-MAY-1992;
14-MAY-1992;
14-MAY-1992;
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14-MAY-1992;
14-MAY-1992;
14-MAY-1992;
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07-DEC-1992;
07-DEC-1992;
07-DEC-1992;
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14-MAY-1992;
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14-MAY-1992
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26-AUG-1992;
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                                                          Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a stimulus-responsive DNA organization undergoing formation/dissociation of a supercoil or rotation in response to an external stimulus and comprises a number of plasmid DNAs ligated in it. The DNA organization is applicable in various materials and body parts or medical micromachines e.g. artificial muscles. This sequence represents an oligonucleotide used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                            Stimulus-responsive DNA organization of highly compatible functional material undergoing reversible formation/dissociation of supercoil or rotation in response to external stimulus, useful as e.g. artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RNA; enzyme; enzymatic RNA molecule; ERM; cleave; RNA; mRNA; HnRNA;
picornavirus; HIV; immunodeficiency virus; hepatitis B virus; HBV;
papilloma virus; HPV; Epstein-Barr virus; EBV; TCLV;
                                                                                                                                                                                     stimulus-responsive DNA organization; supercoil; rotation; rrnal stimulus; medical micromachines; artificial muscle.
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                                                                                                                                                              Stimulus-responsive DNA organization oligonucleotide #2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; SEQ ID NO 3; 29pp; Japanese.
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 930 ATCCCTCTTCAT 944
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                                                                                     ADD71432 standard; DNA; 15
                                                                                                                                      (first entry)
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Best Local Similarity 80.0
Matches 12; Conservative
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                                                                                                                                      15-JAN-2004
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                                                                                                                                                   SAGE tag; serial analysis of gene expression; antigen-presenting cell; APC; monocyte-derived dendritic cell; differential gene expression; immunostimulatory cofactor; costimulatory factor; CTL;
                                                                                                                                                                                             cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss
                                                                                                                          Human dendritic cell SAGE tag, SEQ ID NO:1038.
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98US-0089997P.
98US-0090000P.
98US-0090035P.
98US-0090035P.
98US-0090041P.
98US-0090044P.
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98US-0090079P.
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98US-0089853P.
98US-0089878P.
                                              AAZ78610 standard; DNA; 10 BP
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                                                                                                    (first entry)
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19-JUN-1998;
19-JUN-1998;
19-JUN-1998;
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08-DEC-1998;
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19-400-1998
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                                                                           AAZ78610;
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preferentially or differentially expressed in dendritic cells, while other transcripts correspond to novel genes. Antigen-presenting cell (APC)-associated costimulatory factors play an important role in the activation of the oytoxic immune response, particularly against tumour cells. Tumour antigen presentation by T-cell receptors is alone complex) and subsequent recognition by T-cell receptors is alone complex. Immunostimulatory cofferors also being required for the tumour cells, immunostimulatory coffactors also being required for efficient activation of cytoxic T-lymphocytes (CTIs). Nucleic acid sequences identified using the SAGE tags have several potential uses. They may be used in vaccines to induce an immune response, particularly against a tumour antigen; to modulate the genotype of an APC; to screen for agents that modulate expression of differentially expressed genes in an APC; and as hybriddisation probes/amplification primers for the chancing of diseases related to abnormal expression of these genes. Detection of the dendritic cell differentially expression of their encoded proteins, can be used to disentify calls as belonging to the monocyte lineage. Cells containing these genes cells as belonging to the monocyte lineage. Cells containing these genes couls in gene therapy. Co-administration of tumour antigens and procession of them are used in gene therapy.
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98US-0090035P.
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SAGE tag; serial analysis of gene expression; antigen-presenting cell; APC; monocyte-derived dendritic cell; differential gene expression; immunostimulatory cofactor; costimulatory factor; CTL; cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.

Homo sapiens W09965924-A2

Human dendritic cell SAGE tag, SEQ ID NO:862.

(first entry)

10-APR-2000

AAZ78434;

AAZ78434 standard; DNA; 10 BP.

RESULT 649 AAZ78434/

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activation of the cytotoxic immune response, particularly against tumour calls. Thurus activation of the cytotoxic immune response, particularly against tumour cells. Tumour antigen presentation via the MHC (major histocompatibility complex) and subsequent recognition by T-cell receptors is alone insufficient to activate a robust cytotoxic immune response that can lyse the tumour cells, immunostimulatory cofactors also being required for efficient activation of cytotoxic T-lymphocytes (TLPs). Nucleic caid sequences identified using the SAGE tags have several potential uses. They may be used in vaccines to induce an immune response, particularly capainst a tumour antigen; to induce an immune response, particularly capainst a tumour antigen; to ondulate the genotype of an APC; to screen for against that modulate expression of differentially expressed genes in an APC; and as hybridisation probes/amplification primers for the diagnosis, prognosis and monitoring of diseases related to abnormal expression of these genes. Detection of the dendritic cell differentially expressed genes, or of their encoded proteins, can be used to identify cells as belonging to the monocyte lineage. Cells containing them are used in active immunotherapy (or to stimulate production of a population of antigen specific effector cells) and vectors containing them are used in gene therapy. Co-administration of tumour antigens and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequences AAZ77573-Z79709 represent SAGE (serial analysis of gene expression) tags used to identify mRNA transcripts encoding immunostimulatory cofactor proteins which are preferentially or cofactor proteins which are preferentially compared with monocytes. Some of the transcripts correspond to known genes or ESTs (expressed sequence tags) which were previously unknown to be preferentially or differentially expressed in dendritic cells, while other transcripts correspond to novel genes. Antigen-presenting cell (APC) -associated costimulatory factors play an important role in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APC-associated costimulatory factors ensures adequate antigen presentation to endogenous APCs and upregulates the APCs for the presentation of co-stimulatory signals, migration to T cell-rich sites, secretion of T cell growth factors and secretion of chemokines for recruitment of immune effector cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Isolated polynucleotides differentially expressed in antigen-presenting cells, useful in gene vaccines against cancer.
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                                                                              98US - 0090042P
98US - 0090043P
98US - 0090044P
98US - 0090047P
98US - 0090047P
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Claim 1; Page 90; 130pp; English.
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98US-0090040P.
98US-0090041P.
98US-0090041P.
98US-0090043P.
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                                                                                                                                                                                                                                                                                                                                Shankara S;
                                                                                                                                                                                                                                                                                                        (GENZ ) GENZYME CORP. (ROBE/) ROBERTS B L.
                                                                                                                                                                                                                                                                                                                                            WPI; 2000-106077/09.
                                                                                                                                                                                                                                                                                                                    SHANKARA S.
                                                                                                                                                                                                                                                                                                                                Roberts BL,
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Matches 10; Conservative
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expression) tags used to identify mRNA transcripts encoding immunostimulatory cofactor proteins which are preferentially or differentially expressed in monocyte-derived dendritic cells compared with monocytes. Some of the transcripts correspond to known genes or ESTs
Isolated polynuclectides differentially expressed in antigen-presenting cells, useful in gene vaccines against cancer.
                                                                                                                                                                                                                                                                                Sequences AAZ77573-Z79709 represent SAGE (serial analysis of gene
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10 rerriecerr

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Query Match

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Captures agregation to aggs, while were previously unknown to be preferentially or differentially expressed in dendritic cells, while other transcripts correspond to novel genes. Antigen-presenting cell (APC)-associated costimulatory factors play an important role in the activation of the cytotoxic immune response, particularly against tumour cells. Tumour antigen presentation via the WHC (major histocompatibility complex) and subsequent recognition by T-cell receptors is alone insufficient to activate a robust cytotoxic immune response that can lyse the tumour cells, immunostimulatory offactors also being required for efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid sequences identified using the SAGE tags have several potential uses. They may be used in vaccines to induce an immune response, particularly sequences identified using the SAGE tags have several potential uses. They may be used in vaccines to induce an immune response, particularly against a tumour antigen; to modulate the genotype of an APC; to screen for a gents that modulate expression of differentially expressed genes in an APC; and as hybridisation probes/amplification primers for the diagnosis, prognosis and monitoring of diseases related to abnormal expression of these genes, or of their encoded proteins, can be used to identify calls as belonging to the monocyte lineage. Cells containing these genes on be used in active immunotherapy (or to stimulate production of a population of antigen-specific effector cells) and vectors containing them are used in gene therapy. Co-administration of tumour antigens and APC-associated costimulatory factors ensures adequate antigen present and unremined breast the above the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             presentation to endogenous APCs and upregnlates the APCs for the presentation of for-filmulatory signals, migration to T cell-rich sites, secretion of T cell growth factors and secretion of chemokines for recruitment of immune effector cells
   sequence tags) which were previously unknown to be
   (expressed
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13.7%; Score 10; DB 1; Length 10; 100.0%; Pred. No. 8.9e+02; ive 0; Mismatches 0; Indels Sequence 10 BP; 7 A; 2 C; 1 G; 0 T; 0 U; 0 Other; 100.0%; Prec. ... Query Match 13.7° Best Local Similarity 100. Matches 10, Conservative 913 TTTGGTCTTT 922 н 10 TTTGGTCTTT

SULT 650

AAZ84747 standard; DNA; 10 BP. (first entry) 07-APR-2000 AAZ84747; Z84747

Metastatic breast tumour cell downregulated transcript tag #3981.

Human; metastatic breast tumour tissue; breast cancer; tag; primer; non-metastatic breast tumour tissue; gene therapy; anticancer; antimetastatic; vaccine; diagnosis; ss.

Homo sapiens.

WO9965928-A2.

23-DEC-1999.

99WO-US013647. 18-JUN-1999; 19-JUN-1998

98US-0089997P. 98US-0089853P. 19-JUN-1998;

98US-0090041P 19-JUN-1998 19-JUN-1998

Shankara S; (SHAN/) SHANKARA S. Roberts BL,

(GENZ) GENZYME CORP. (ROBE/) ROBERTS B L.

New isolated polynuclectides, useful for identifying specific cell type, such as cancer cell, comprises transcriptomes expressed in particular

Kinzler KW;

Vogelstein B,

WPI; 2001-367706/38.

such as canc cell types.

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AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts that are preferentially transcribed in the metastatic breast tumour cells. that are preferentially transcribed in the present tumour cells. AAZ83942 to AAZ86677 represent tags corresponding to distinct transcripts that are preferentially transcribed in the primary or non-metastatic breast tumour cissue (i.e. are downregulated in metastatic breast tumour cells). These transcripts can be used for diagnosis, monitoring and transcripts can be used for diagnosis, monitoring and transcripts can be used for diagnosis, monitoring and creatment of breast cancer, particularly where metastatic. Diagnosis is compounds that modulate expression of the transcripts are potentially useful for treatment of (metastatio) breast cancer, while promoters from the transcripts are used to direct expression, in selected cell types, of particularly an antigen-encoding sequence for use in gene or cell-based vaccines, for diagnosing breast cancer and for raising specific of antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic agents. Host cells that produce the polypeptides can be used to expand and isolate populations of educated, antigen-specific immune effecter effecter effecter effecter effecter effecter effecter effecte
                                         Isolated polynucleotides differentially expressed between metastatic and non-metastatic breast cancer cells, useful for diagnosis, prevention and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             transcriptome; gene expression pattern; cancer; drug screening; diagnosis; cell specific gene expression; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13.7%; Score 10; DB 1; Length 10; 100.0%; Pred. No. 8.9e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 10 BP; 0 A; 1 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                         Claim 1; Page 164; 219pp; English.
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WPI; 2000-106079/09.
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AAH63232
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Gaps

0;

0; Indels

72.

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The present invention describes a method of identifying the type of cell in a sample, involving determining which of the sequences AAH63161-AAH64724 is expressed by the cell. The transcriptomes described in the invention are cell-type specific, cancer specific or ubiquitously expressed in humans. They can also be used to screen for drugs, reduce cancer specific gene expression, standardise expression and restore the function of a diseased cell or tissue. The present sequence is one of the transcriptomes described in the exemplification of the invention Claim 11; Page 40; 94pp; English.

Sequence 10 BP; 1 A; 1 C; 2 G; 6 T; 0 U; 0 Other;

ö Gaps . 0 13.7%; Score 10; DB 1; Length 10; 100.0%; Pred. No. 8.9e+02; tive 0; Mismatches 0; Indels Query Match 13.7 Best Local Similarity 100. Matches 10; Conservative

941 TCATTGGTTT 950 10 TCATTGGTTT

AAF43800 standard; DNA; 10 BP. RESULT 65 AAF43800

AAF43800;

23-MAR-2001 (first entry)

Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:11939.

Yeast, Saccharomyces cerevisiae, characterisation, cell cycle, NORF, nor previously assigned open reading frame; nonannotated ORF, SAGE, serial analysis of gene expression; antifungal; tag; identification; linker; PCR primer; ds.

Saccharomyces cerevisiae.

WO200077214-A2.

21-DEC-2000

14-JUN-2000; 2000WO-US016223

99US-00335032 16-JUN-1999;

SNIXYOH SNHOU VINU (OLYU)

Kinzler Vogelstein B, Velculescu V,

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WPI; 2001-061874/07.

Yeast gene coding sequences comprising NORF genes with serial analysis of gene expression (SAGE) tags, useful for studying, monitoring and affecting phases of the cell cycle.

Example; Page 376; 419pp; English

The present invention describes an isolated DNA molecule comprising a coding sequence of a yeast gene selected from a group of 745 NORF (not previously assigned open reading frame, or nonannotated ORF) genes comprising a SAGE (serial analysis of gene expression) tag. Also described are: (1) a method (MI) of using NORF genes to affect the cell cycle comprising administering a NORF gene whose expression varies by at least 10% between any two phases of the cell cycle selected from log phase, S phase and GZ/M; (2) a method (M2) for screening candidate antifungal drugs comprising: (a) contacting a test substance with a yeast cell; and (b) monitoring expression of a NORF gene whose expression varies as in MI, where a test substance which modifies the expression the yeast gene is a candidate antifungal drug; (3) a method (M3) for identifying human genes which are involved in cell cycle progression

comprising contacting human DNA with a probe which comprises at least 10 contiguous nuclectides of a NORF gene whose expression varies as in M1; and (4) a method (M4) for identifying a candidate drug as a member of a class of drugs having a characteristic effect on gene expression in a yeast cell comprising contacting a yeast cell with a candidate drug and annitoring expression in the yeast cell of at least 1 NORF gene whose expression is affected by the class of drugs. The NORF genes may be used to study, monitor and affect phases of the cell cycle, the differentially expressed genes may be used as markers of phases of the cell cycle. The methods may be used to identify candidate drugs which affect the cell cycle and for identification of antifungal drugs. AAP33268 to AAF44664 represent Linkers and PCR primers used in the SAGE method, in the exemplification of the present invention.

Sequence 10 BP; 0 A; 1 C; 3 G; 6 T; 0 U; 0 Other;

Gaps 0; Length 10; Indels 13.7%; Score 10; DB 1; Le 100.0%; Pred. No. 8.9e+02; 100.0%; Pred. No. 8.9 ive 0; Mismatches Local Similarity 100. nes 10; Conservative Query Match Matches

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Dp

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RESULT 653 **AAF**39218,

AAF39218 standard; DNA; 10 BP.

AAF39218;

(first entry) 23-MAR-2001 Weast NORF gene SAGE tag oligonuclectide SEQ ID NO:5957.

Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF; nor previously assigned open reading frame; nonannotated ORF; SAGE; serial analysis of gene expression; antifungal; tag; identification; linker; PCR primer; ds.

Saccharomyces cerevisiae.

WO200077214-A2.

21-DEC-2000.

99US-00335032. 14-JUN-2000; 2000WO-US016223. 16-JUN-1999;

SNINGO ONING (OFAD)

Kinzler

Vogelstein B,

Velculescu V,

WPI; 2001-061874/07.

Yeast gene coding sequences comprising NORF genes with serial analysis of gene expression (SAGE) tags, useful for studying, monitoring and affecting phases of the cell cycle.

Example; Page 212; 419pp; English.

The present invention describes an isolated DNA molecule comprising a coding sequence of a yeast gene selected from a group of 745 NORF (not previously assigned open reading frame; or nonannotated ORF) genes comprising a SAGE (serial analysis of gene expression) tag. Also described are: (1) a method (M1) of using NORF genes to affect the cell cycle comprising administering a NORF gene whose expression varies by at clear 10% between any two phases of the cell cycle selected from log phase, S phase and G2/M; (2) a method (M2) for screening candidate antifungal drugs comprising: (a) contacting a test substance with a yeast cell; and (b) monitoring expression of a NORF gene whose expression

varies as in M1, where a test substance which modifies the expression of the yeast gene is a candidate antifungal drug; (3) a method (M3) for identifying human genes which are involved in cell cycle progression comprising contacting human DNA with a probe which comprises at least 10 contiguous nucleotides of a NORF gene whose expression varies as in M1; and (4) a method (M4) for identifying a candidate drug as member of a class of drugs having a characteristic effect on gene expression in a yeast cell comprising contacting a yeast cell with a candidate drug and monitoring expression in the yeast cell of at least 1 NORF genes whose expression is a ffected by the class of drugs. The NORF genes may be used to study, monitor and affect phases of the cell cycle, the differentially expressed genes may be used as markers of phases of the cell cycle. The methods may be used to identify candidate drugs which affect the cell cycle and for identification of antifungal drugs. AAP33268 to AAF44064, represent SAGE tags used in the examplification of the present invention. method, in the exemplification of the present invention

Sequence 10 BP; 7 A; 2 C; 1 G; 0 T; 0 U; 0 Other;

Gaps ; 0 13.7%; Score 10; DB 1; Length 10; 100.0%; Pred. No. 8.9e+02; 0; Indels 0; Mismatches Local Similarity 100. 909 TTTCTTTGGT 918 10 TTTCTTTGGT 1 Query Match Matches

SSULT 654

AAS95651 standard; DNA; 10 BP. 4895651/

AAS95651;

(first entry) 14-FEB-2002 Human NPY1R gene allele-specific oligonucleotide PCR primer #6.

Human; neuropeptide Y receptor Y1; NPY1R; ss; antiarteriosclerotic; haplotyping; haplotype pair; single nucleotide polymorphism; genotyping; gene therapy; drug screening; cardiovascular disease; antidepressant; hypertension; cardiant; depression; probe; sequencing primer; PCR primer; PCR primer universal tail.

Homo sapiens.

WO200185742-A2.

15-NOV-2001.

07-MAY-2001; 2001WO-US014773.

05-MAY-2000; 2000US-0201950P.

(GENA-) GENAISSANCE PHARM INC

Koshy B, Kliem SE, Choi JY,

Lee HH;

WPI; 2002-055579/07.

New isolated polynucleotide variant of neuropeptide Y receptor YI (NPYIR) for studying the function of NPYIR, and expressing NPYIR protein for use in screening candidate drugs to treat NPYIR-related diseases.

Claim 17; Page 12; 48pp; English.

The invention relates to single nucleotide polymorphisms in the human neuropeptide Y receptor X1 (NPXIR) gene. A method for haplotyping the NPYIR gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the NPYIR haplotypes given in the specification or whether both copies are defined by a haplotype pair.

This method is useful in genotyping, whereby all possible haplotype pairs can be assigned to specific genotypes. An association between a trait and can be assigned to specific genotypes. An association between a trait and can haplotype pair of the haplotype pair in a reference or haplotype pair in a reference population, where a higher haplotype or haplotype pair in a reference population, where a higher haplotype or haplotype pair. Nature a higher haplotype or haplotype pair. Nature a higher haplotype or haplotype pair. Nature and its corresponding DNA are used for studying the expression and function of NPVIR, for use in screening of crandioate drugs to creat diseases related to NPVIR, activity, such as cardiovascular diseases (e.g. hypertension) and depression. The sequences are also useful for studying the effect of variation on the biological cardiovascular diseases on the binding affinity of candidate drugs cardiovascular sequences AAS9563-AAS95659 represent allele-specific oligonucleotide probes, sequencing primers, PCR primers and PCR primer CC universal tails used to detect NPVIR gene polymorphisms

Sequence 10 BP; 6 A; 1 C; 3 G; 0 T; 0 U; 0 Other;

Gaps .; 0 13.7%; Score 10; DB 1; Length 10; 100.0%; Pred. No. 8.9e+02; ive 0; Mismatches 0; Indels Local Similarity 100. Les 10; Conservative Query Match Matches

0

918 TCTTTGCCTT 927 10 TCTTTGCCTT

à d

o;

RESULT

ABK55553 standard; DNA; 10 BP. ABK55553

(first entry) 18-JUN-2002 ABK55553;

Selectin L Lymphocyte Adhesion Molecule 1 (SELL) oligonucleotide #89

neonatal pertussis; whooping cough; haplotyping; primer; allele-specific oligonucleotide; ss. Selectin L Lymphocyte Adhesion Molecule 1; SELL; Human;

Homo sapiens.

WO200216654-A1.

28-FEB-2002.

27-AUG-2001; 2001WO-US026675.

25-AUG-2000; 2000US-0228262P.

(GENA-) GENAISSANCE PHARM INC.

Kumar AM; Koshy B, Anastasio AE, Bieglecki KM, Kliem SE, WPI; 2002-292071/33.

Novel genetic variants of selectin L lymphocyte adhesion molecule 1 (SELL) gene useful for therapeutic purposes and for expressing SELL protein useful in identifying drugs to treat whooping cough.

Claim 19; Page 15; 137pp; English.

nucleotide sequence which is a polymorphic variant of a reference sequence for Selectin I Lymphocyte Adhesion Molecule 1 (SELL) gene. SELL polypeptide is useful for screening for drugs targeting the polypeptide. Oligonucleotides derived from (I) are used to target SELL and a haplotype or haplotype pair of SELL gene. These are useful in developing diagnostic tests and therapeutic treatments for neonatal pertuasis (Whooping cough). (I) is useful for studying the expression and function of SELL and expressing SELL protein for use in screening for candidate drugs to treat The invention relates to an isolated polynucleotide (I) comprising a

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diseases related to SELL activity. The polymorphism and haplotype data are useful for validating whether SELL is a suitable target for drugs to treat whosping cough, screening for such drugs and reducing bias in clinical trials of such drugs. Establishing the SELL haplotype or and reliability of several steps in the discovery and development of drugs for treating diseases associated with SELL activity e.g. neonatal pertussis (whooping cough). The haplotyping method is useful to validate sell activity cough). The haplotyping method is useful to validate predicted to be associated with SELL activity, e.g. neonatal in screening for compounds targeting SELL to treat a specific condition or disease predicted to be associated with SELL activity, e.g. detecting which of the SELL haplotype pairs present in individual members of a population with the specific disease of interest enables one to screen for compounds that display the highest desired agonist or antagonist activity for each of the most frequent SELL isoforms present in the disease population. A polymorphic variant of SELL is useful in sudding affinity of candidate drugs targeting SELL for the measure the binding affinity of candidate drugs targeting SELL for the binding affinities of one or more candidate drugs targeting the SELL condition the binding affinities of one or more candidate drugs targeting the SELL condition.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein. ABK55465-ABK55559 represent SELL gene allele-specific
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Sequence 10 BP; 1 A; 2 C; 2 G; 5 T; 0 U; 0 Other;

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Length 10;
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   Score 10; DB 1; Le
Pred. No. 8.9e+02;
                        0; Mismatches
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ABV63191 standard; cDNA; 11 (first entry) Human skin EST 977 21-OCT-2002 ABV63191; RESULT 656 ABV63191/c

BP.

Human; skin; dermatological; vulnerary; antipsoriatic; antiseborrhaeic; immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis; psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.

Homo sapiens

WO200253774-A2

11-JUL-2002

20-DEC-2001; 2001WO-EP015179.

03-JAN-2001; 2001DE-01000127

(HENK) HENKEL KGAA.

Hofmann K; Σ Conradt WPI; 2002-590638/63. Petersohn D,

In vitro identification of skin-expressed genes, useful for determining homeostasis and identifying cosmetic or pharmaceutical agents against e.g. skin cancer.

ichthyosis, atopic dermatitis, acne, seborrhea, lupus erythematosus; rosacea, melanoma, basal cell carcinoma; and carcinoma or sarcoma of the skin. The present sequence is that of a human expressed sequence tag

Sequence 11 BP; 6 A; 2 C; 3 G; 0 T; 0 U; 0 Other;

Disclosure; Page 52; 1345pp; German.

The invention relates to in vitro identification (M1) of genes expressed in the skin of humans or animals by subjecting a mixture of genetically

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to in vitro identification (M1) of genes expressed in the skin of humans or animals by subjecting a mixture of genetically encoded factors from skin, to serial analysis of gene expression (SAGE) so as to identify skin-expressed genes and quantify their expression (M1) is useful for identifying genes involved in skin homeostasis; to promotes skin homeostasis and to test agent (A) that maintains or disorders, specifically neurodermatitis; sumburn; psoriasis; scleroderma;
         so as to identify skin-expressed genes and quantify their expression.

(MI) is useful for identifying genes involved in skin homeostasis; to determine skin homeostasis and to test agent (A) that maintains or promotes skin homeostasis or that can be used for treating skin disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma; ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus; rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the skin. The present sequence is that of a human expressed sequence tag (BST) of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          In vitro identification of skin-expressed genes, useful for determining homeostasis and identifying cosmetic or pharmaceutical agents against
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human, skin, dermatological, vulnerary, antipsoriatic, antiseborrhaeic, immunosuppressive, antiinflammatory, cytostatic; SAGE, neurodermatitis; psoriasis; dermatitis; skin cancer; EST, expressed sequence tag; ss.
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gene expression
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                                                                                                                                                                                                                          13.7%; Score 10; DB 1; Length 11; 100.0%; Pred. No. 9.5e+02; tive 0; Mismatches 0; Indels
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encoded factors from skin, to serial analysis of
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                                                                                                                                                                                                                                                                                                                                                                                                                             ABV70612 standard; cDNA; 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                              Local Similarity 100.
nes 10; Conservative
                                                                                                                                                                                                                                                                                                   910 TTCTTTGGTC 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (HENK ) HENKEL KGAA.
                                                                                                                                                                                                                                                                                                                                       10 TTCTTTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-59063B/63.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human skin EST 8398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               e.g. skin cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-JUL-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABV70612;
                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                          RESULT 657
ABV70612/c
                                                                                                                                                                                                                                                                  Matches
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Gaps .; 0 (first entry)

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Human, skin, dermatological, vulnerary, antipsoriatic, antiseborrhaeic, immunosuppressive, antiinflammatory, cytostatic, SAGE, neurodermatitis, psoriasis, dermatitis, skin cancer, EST; expressed sequence tag, ss.
                                                                         Human skin EST 5540.
                                        21-OCT-2002
       ABV67754;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABL91983;
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ABL91983
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                                                                                                                                                                                                                                                                                                                                  Human, skin, dermatological, vulnerary, antipsoriatic, antiseborrhaeic, immunosuppressive, antiinflammatory, cytostatic, SAGB, neurodermatitis, psoriasis, dermatitis, skin cancer, EST, expressed sequence tag, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           In vitro identification of skin-expressed genes, useful for determining homeostasis and identifying cosmetic or pharmaceutical agents against
                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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13.7%; Score 10; DB 1; Length 11; 100.0%; Pred. No. 9.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13.7%; Score 10; DB 1; Length 11; 100.0%; Pred. No. 9.5e+02; ive 0; Mismatches 0; Indels
                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 11 BP; 2 A; 2 C; 1 G; 6 T; 0 U; 0 Other;
           100.0%; Pred. .v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 171; 1345pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hofmann K;
                                                                                                                                                                                            ABV67520 standard; cDNA; 11 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-DEC-2001; 2001WO-EP015179.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-JAN-2001; 2001DE-01000127.
                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conradt M,
                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10; Conservative
                                                                      910 TICITIGGIC 919
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of the invention
                                                                                              TTCTTTGGTC
                                                                                                                                                                                                                                                                                                     Human skin EST 5306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-590638/63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (HENK ) HENKEL KGAA
                Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              e.g. skin cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Petersohn D,
                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                  21-0CT-2002
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                                                                                                                                                                                                                               ABV67520;
 Query Match
                                                                                                                                                         ESULT 658
                                                                                                                                                                             BV67520
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  promotes skin homeostasis or that can be used for treating skin disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma; ichthyosis, atopic dermatitis; acne; seborrhea; lupus erythematcsus; rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the skin. The present sequence is that of a human expressed sequence tag (EST) of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to in vitro identification (M1) of genes expressed in the skin of humans or animals by subjecting a mixture of genetically encoded factors from skin, to serial analysis of gene expression (SAGE) so as to identify skin-expressed genes and quantify their expression. (M1) is useful for identifying genes involved in skin homeostasis, to determine skin homeostasis and to test agent (A) that maintains or
                                                                                                                                                                                                                                                                                                                                                                                                                   In vitro identification of skin-expressed genes, useful for determining homeostasis and identifying cosmetic or pharmaceutical agents against e.g. skin cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mouse; rat; TEM; tumour endothelial marker; NEM; PEM; cytostatic;
endothelial marker; pan-endothelial marker; immunostimulant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antiangiogenic; tumour; neoangiogenesis; vascularised tumour; polycystic kidney disease; diabetes; retinopathy; rheumatoid arthritis; psoriasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13.7%; Score 10; DB 1; Length 11; 100.0%; Pred. No. 9.5e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 11 BP; 0 A; 1 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human Pan-Endothelial Marker SEQ ID NO 81.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 178; 1345pp; German.
                                                                                                                                                                                                                                                                                                                         Hofmann K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABL91983 standard; cDNA; 11 BP.
                                                                                                                                                          20-DEC-2001; 2001WO-EP015179.
                                                                                                                                                                                                               03-JAN-2001; 2001DE-01000127.
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Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                         Conradt M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           913 TTTGGTCTTT 922
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                                                                                                                                                                                                                                                                 (HENK ) HENKEL KGAA
                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-590638/63.
                                                  WO200253774-A2
                                                                                                                                                                                                                                                                                                                      Petersohn D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human, mouse;
normal endothe
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-MAY-2002
                                                                                                       11-JUL-2002.
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3V67754) ABV67754 standard; cDNA; 11 BP.

SULT 659

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1 GTCATTTTCT

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                                                                                                                                                                                                                                                                             The invention relates to an isolated molecule comprising an antibody variable region which specifically binds to an extracellular domain of a tumour endothelial marker (TEM) protein selected from ABB90732, ABB90740, ABB90749, ABB90749, ABB907450 and ABB90763. The antibodies which bind to TEM proteins have cytostatic, immunostimulant and antiangiogenic activity. They are useful for inhibiting tumour growth, neoanglogenesis in subjects bearing a vascularised tumour, polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis and psoriasis. Human, mouse and rat TEM genes and the encoded proteins (ABL92075-ABL92141 and ABB90721-ABB90789) are disclosed, as are marker oligonucleotide sequences: tumour endothelial markers (TEM) ABL91996-ABL92041 and ABL92143-ABL92191; normal endothelial markers (NEM) ABL92042-ABL92044; and pan-endothelial markers (PEM) ABL91998. The present sequence is that of an oligonucleotide marker useful to the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                         An isolated molecule comprising an antibody variable region which specifically binds to an extracellular domain of a tumor endothelial marker (TEM) protein, useful for inhibiting tumor growth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; endothelial cell; EC; tumour endothelial cell; TEM; NEM; Tumour endothelial marker; normal endothelial marker; PEM; pan-endothelial marker; polycystic kidney disease; psoriasis; diabetic retinopathy; rheumatoid arthritis; tumour angiogenesis; necangiogenesis; immune response; cytostatic; antidiabetic; ophthalmological; antirheumatic; antiarthritic; antipsoriatic; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13.7%; Score 10; DB 1; Length 11; 100.0%; Pred. No. 9.5e+02; trive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA tag used to identify human gene encoding PEM 81.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 11 BP; 2 A; 2 C; 1 G; 6 T; 0 U; 0 Other;
                                                                                                                                                           Kinzler KW, Vogelstein B;
                                                                                                                                                                                                                                                           Example 4; Page 326; 331pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABX71908 standard; DNA; 11 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-APR-2002; 2002WO-US008253.
                                                              01-AUG-2001; 2001WO-US024031.
                                                                                                  2000US-0224360P
                                                                                                            11-APR-2001; 2001US-0282850P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-MAR-2003 (first entry)
                                                                                                                                    SNIXAOH SNHOL VINU ( OLYU)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 100.
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              WO200210217-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                      02-AUG-2000;
                                                                                                   11-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-OCT-2002.
                                                                                                                                                            St Croix B,
                                      07-FEB-2002
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                                                                                                                                                                                                                                                                   New purified human transmembrane protein, designated as tumor endothelial marker (TEM) 3, useful for detecting, diagnosing or treating tumors, polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to a novel method for the isolation of endothelial cells (ECs), and the identification of genes expressed in normal and tumour ECs. Tumour endothelial marker (TEM), normal endothelial marker (TEM), normal endothelial marker (PEM), normal condition in human ECs. The human EC marker proteins and the joilvnoleotide sequences encoding them are useful for detecting diagnosing or treating tumours as well as polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis, and psoriasis. They are also useful for inhibiting neoangiogenesis or tumour angiogenesis, for inhousing an immune response to tumour endothelial cells in a patient, or for identifying candidate drugs for treating tumours. ABX71828-ABX71999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver; resistance; chemotherapeutic agent; colchicine; doxoubicin; colon; actinomycin D; vinblastine; small intestine; kidney; adrenal gland; adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia; human; chronic myelogenous leukemia; CML; follicular lymphoma; human; chronic myelogenous leukemia; breast cancer; colon carcinoma; neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif; hairpin; hepatitis delta virus; group I intron; RNaseP; ss.
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Pred. No. 9.5e+02;
                                                                                                                                                  Vogelstein B;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  represent DNA tags for human PEM, TEM or NEM genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 11 BP; 2 A; 2 C; 1 G; 6 T; 0 U; 0 Other;
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100.0%; Pred. No. >...
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                                                                                                                                                  Kinzler KW,
                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 99; 374pp; English.
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92US-008B2BB5.
92US-00936110.
92US-00936421.
                                                                                                                                                     St Croix B,
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11-APR-2001; 2001US-0282850P. 06-FEB-2002; 2002US-0354262P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAQ51837 standard; RNA; 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (revised)
(first entry)
                                                                                       (UYJO ) UNIV JOHNS HOPKINS.
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ses 10; Conservative
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                                                                                                                                                     Carson-Walter E,
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26-AUG-1992;
26-AUG-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9323057-A1
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26-MAY-1994
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                                                                                                                                                                                                                                                                                                                                                             psoriasis.
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schultz1-899.rng

26-AUG-1992;

07-DEC-1992;

19-JAN-1993

Thompson JD,

resistance.

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The present invention describes oligonucleotides (I) of 10-15 residues corresponding to a part of a vascular endothelial growth factor (VEGF) comprising 1 of 6 sequences given in AAAO6692 to AAAO6693. AAAO6698 to AAAO6703 represent VEG antisense oligonucleotides used in the exemplification of the present invention. The antisense oligonucleotides an contain phosphorothioate linkages. Oligonucleotides from the present invention have cytostatic and angiogenic activities, and can be used in gene therapy. The oligonucleotides are useful for inhibiting the expression of VEGF, e.g. for the treatment of diseases associated with abnormal vascular permeability, cell proliferation, cell permeation, angiogenesis, neovascularisation, tumour cell growth and/or metastasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                   oligonucleotides corresponding to a part of a vascular endothelial factor, useful for treating e.g. tumor cell growth and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oligonucleotide primer SEQ ID NO 323365 for detecting SNP TSC0031356.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 12 BP; 0 A; 3 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                            Woessner RD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13.7%; Score 10; DB 1;
100.0%; Pred. No. 1e+03;
.ive 0; Mismatches C
                                                                                                DEUT
                                                                                                                                          Bitonti AJ,
                                                                                                                                                                                                                                                                                                                     Example 1; Page 17; 73pp; English.
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                                                                                             ROUSSEL
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       98EP-00114853
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                                                                                           (HMRI ) HOECHST MARION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ulhmann E, Peyman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                    WPI; 2000-258586/23
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Best Local Similarity
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                                              07-AUG-1998;
         07-AUG-1998;
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growth factor
metastasis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                  The sequences given in AAQS1825-2266 represent areas of mRNAs associated with development or maintenance of chronic myelogenous leukemia (CML), promyelocytic leukemia, Burkitt's lymphoma, or acute lymphocytic leukemia, breast cancer, colon carcinoma, neuroblastoma and lung cancer. The full length mRNAs containing these target sequences, encode aberant cellular proteins which are able to control cellular proliferation and are directly linked to a leukemic phenotype. These target sequences are identified by the ribozyme of the invention. The ribozymes is formed in a hammerhead motif, but may also be formed in the motif of a hairpin, hepstitis delta virus, group I intron or RNaseP-like RNA. These ribozymes may be used to inhibit the development or expression of a transformed phenotype in man and other animals by modulating expression of the corresponding gene. Cleavage of target mRNAs expressed in pre-neoplastic and transformed cells elicits inhibition of the transformed state. Multiple drug resistance used by transformed cells and thus enhances drug therapies for tumours. The ribozymes may also be used to study genetic drift and mutations within cells. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                           enzymatic RNA molecules (ribozymes) - which cleave mRNA associated tumours or mRNA expressed from gene encoding multiple drug
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; vascular endothelial growth factor; VEGF; phosphorothioate; antisense cligonuclectide; inhibition; cytostatic; angiogenic; gene therapy; abnormal vascular permeability; cell proliferation; cell permeation; angiogenesis; neovascularisation; tumour cell growth; metastasis; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13.7%; Score 10; DB 1; Length 12; 100.0%; Pred. No. 1e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                    Claim 3; Fig 3; 69pp; English.
                92US-00936531.
92US-00936532.
92US-00987131.
93US-0006122.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAA06762 standard; DNA; 12 BP.
92US-00936422
                                                                                                           93US-00008910
                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC.
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Query Match

sapiens

Homo

16-FEB-2000.

EP979869-A1 Synthetic.

05-JUN-2000

AAA06762;

SULT 663

A06762

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Gaps

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Length 12; 0; Indels schultz1-899.rng

0

Gaps

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Sequence 12 BP; 4 A; 0 C; 8 G; 0 T; 0 U; 0 Other;
                                                                                                                                                  ABI26795 standard; DNA; 12 BP.
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                                                                                            Query Match 13.7
Best Local Similarity 100.
Matches 10; Conservative
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methylation status.
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941

Berlin K;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide primer SEQ ID NO 297135 for detecting SNP TSC0017438.
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                                                                                                                                                               13.7%; Score 10; DB 1; Length 12; 100.0%; Pred. No. 1e+03; cive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 12 BP; 2 A; 1 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                            Sequence 12 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
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Matches 10; Conservative
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                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, certival nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire printed specification, but fire wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide primer SEQ ID NO 326768 for detecting SNP TSC0033271.
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                                                           Claim 1; SEQ ID NO 323365; 29pp + Sequence Listing; German.
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Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                          Oligonucleotide primer SEQ ID NO 325177 for detecting SNP TSC0032436.
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                                                                                                         ABI25204 standard; DNA; 12 BP.
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ABH77932 standard; DNA; 12
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Best Local Similarity 100.
Matches 10; Conservative
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peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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(EPIG-) EPIGENOMICS AG.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99899, ABF00010-ABE9989, ABH00010-ABH99989 and ABI00010-ABI82073 tepersent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                        useful for diagnosis and cell typing, is
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                Claim 1; SEQ ID NO 293399; 29pp + Sequence Listing; German.
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ftp.wipo.int/pub/published_pct_sequences
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nes 10; Conservative
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                                Olek A, Piepenbrock C,
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                                                                                                                                             methylation status.
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.. 0 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABP9989, ABF00010-ABP9989 This invention describes novel oligonucleotide primers or peptide nucleic acid (PRA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonuclectide primer SEQ ID NO 267413 for detecting SNP TSC0000187. Gaps Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status. 0 Claim 1; SEQ ID NO 267413; 29pp + Sequence Listing; German. Score 10; DB 1; Length 12; Pred. No. 1e+03; 0; Mismatches 0; Indels Sequence 12 BP; 2 A; 3 C; 0 G; 7 T; 0 U; 0 Other; Sequence 12 BP; 4 A; 0 C; 1 G; 7 T; 0 U; 0 Other; 100.0%; Pred. No. -ftp.wipo.int/pub/published_pct_sequences ftp.wipo.int/pub/published_pct_sequences Berlin K; BP. 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173. 13.7%; ABH67436 standard; DNA; 12 (first entry) 10; Conservative Olek A, Piepenbrock C, 948 TTTAATGTAT 957 (EPIG-) EPIGENOMICS AG. TTTAATGTAT 11 WPI; 2001-657177/75 Query Match Best Local Similarity WO200177384-A2 Homo sapiens 22-FEB-2002 18-OCT-2001. ABH67436; N RESULT 671 Matches ABH67436 8866666666668888888à ద

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acid (RNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomers are used for diagnosis and/or proposis of cancer and a range of diseases including immune system, gastrointestinal, respiratory central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABP00010-ABR99989, ABN0010-ABR99989, and ABI00010-ABIS2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                     Oligonuclectide primer SEQ ID NO 279661 for detecting SNP TSC0007676.
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Pred. No. 1e+03;
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100.0%; Pred. No. ...
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                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                           Oligonucleotide primer SEQ ID NO 279186 for detecting SNP TSC0007021.
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13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels
               DB 1; Length 12;
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hes 0; Indels
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H79668/c
ABH79668 standard; DNA; 12 BP.
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Best Local Similarity
Matches 10; Conserv
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Gaps

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Homo sapiens

Berlin K;

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acid (PNA) oligomers for detecting single mucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC09989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, and ABI0010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                          This invention describes novel oligonucleotide primers or peptide nucleic
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                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 281171; 29pp + Sequence Listing; German.
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Best Local Similarity 100.
Matches 10; Conservative
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                                                                                                                       This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 tepsesm the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Pred. No. 1e+03;
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                                                                                         Claim 1;
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-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at its published_pot_sequences.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                Oligonucleotide primer SEQ ID NO 294268 for detecting SNP TSC0016029.
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                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide primer SEQ ID NO 298666 for detecting SNP TSC0018226.
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Best Local Similarity 100.
Matches 10; Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formmat from WIPO at fire wipo.int/pub/published_pot_sequences
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                             Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
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                                                                  This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
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Claim 1; SEQ ID NO 299891; 29pp + Sequence Listing; German.
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Best Local Similarity 100.
Matches 10; Conservative
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χ. Berlin

Piepenbrock C,

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                                                 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABC0010-ABF9989, ABH0010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
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Claim 1; SEQ ID NO 366291; 29pp + Sequence Listing; German.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABE99989, ABH00010-ABE99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Claim 1; SEQ ID NO 368826; 29pp + Sequence Listing; German.

schultz1-899.rng

Homo sapiens.

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                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                           Oligonucleotide primer SEQ ID NO 298722 for detecting SNP TSC0018249
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               ABH98729 standard; DNA; 12 BP
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ABH79432/c
ABH98729,
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligoners for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligoners are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABE9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 279425; 29pp + Sequence Listing; German.
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06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Piepenbrock C,

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABE99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                            betool oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                           WPI; 2001-657177/75
olek A,
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Sequence 12 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Gaps . 0 13.7%; Score 10; DB 1; Length 12; 100.0%; Pred. No. 1e+03; ive 0; Mismatches 0; Indels Query Match Best Local Similarity 100. Matches 10; Conservative

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ABI51574 standard; DNA; 12 BP.

ABI51574;

(first entry) 22-FEB-2002 Oligonucleotide primer SEQ ID NO 351547 for detecting SNP TSC0047371.

SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 351547; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The

13.7%; Score 10; DB 1; Length 12;

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oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligoners are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fitp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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RESULT 689

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF3073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from NIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                    Oligonuclectide primer SEQ ID NO 338834 for detecting SNP TSC0040703.
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ID ABI59029 standard; DNA; 12
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                                                                                                                                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                             Oligonucleotide primer SEQ ID NO 325194 for detecting SNP TSC0032450.
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                      926 TTTTATCCT 935
                                                                                                                    TTTTATCCCT 11
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Best Local Similarity
Matches 10; Conserv
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RESULT 690

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                                                                                                                                                                                                                                                                           This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretracted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                                                                                                                                              designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                            Berlin K;
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                               06-APR-2001; 2001WO-IB000713.
                                                              07-APR-2000; 2000DE-01019173.
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Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                           Piepenbrock C,
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                                                                                                                                                        WPI; 2001-657177/75.
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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomacleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABR0010-ABR99989 and ABI0010-ABR99899 and ABI0010-ABR9989 and cancer and data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                             This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                  Claim 1; SEQ ID NO 363431; 29pp + Sequence Listing; German.
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Pred. No. 1e+03;
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100.0%;
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Best Local Similarity 100...
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                         Oligonucleotide primer SEQ ID NO 364633 for detecting SNP TSC0005622.
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designed to detect single-nucleotide polymorphisms and cytosine
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  1 TTTAATGTAT 10
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represent the oligomers described in the invention. NOTE: The sequence data for this patcht did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotide primer SEQ ID NO 299350 for detecting SNP TSC0018533.
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                                                                                                                                                            13.7%; Score 10; DB 1; Length 12; 100.0%; Pred. No. 1e+03; tive 0; Mismatches 0; Indels
                                                                                                                   Sequence 12 BP; 2 A; 2 C; 0 G; 8 T; 0 U; 0 Other;
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18-OCT-2001

ABH99357;

RESULT 694 ABH99357

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0 Gaps Oligonucleotide primer SEQ ID NO 321211 for detecting SNP TSC0030111. 0 13.7%; Score 10; DB 1; Length 12; 100.0%; Pred. No. 1e+03; ive 0; Mismatches 0; Indels

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABF9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Best Local Similarity 100.
Matches 10, Conservative
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                                               Piepenbrock C,
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            (EPIG-) EPIGENOMICS AG.
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Sequence 12 BP; 6 A; 0 C; 3 G; 3 T; 0 U; 0 Other;

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acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNE) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF0010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989, and ABI00010-ABF99989, and ABI00010-ABF99989, and ABI00010-ABF99989, and contained in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
This invention describes novel oligonucleotide primers or peptide nucleic
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Best Local Similarity 100.
Matches 10; Conservative
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

ķ Berlin Olek A, Piepenbrock C,

WPI; 2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell typing, : designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 330297; 29pp + Sequence Listing; German.

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF0010-ABF99899, ABF0010-ABF99999 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at This invention describes novel oligonucleotide primers or peptide nucleic

RESULT 701

ABI26799

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABE9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                   Oligonucleotide primer SEQ ID NO 296020 for detecting SNP TSC0016856.
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:ive 0; Mismatches
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                              ABH96027 standard; DNA; 12 BP.
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WO200177384-A2 Homo sapiens.

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010 ABC99989, ABF00010-ABH99989 and ABI00010-ABI32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but two obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 356367; 29pp + Sequence Listing; German.
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                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                    Oligonucleotide primer SEQ ID NO 326772 for detecting SNP TSC0033272.
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ABI26799 standard; DNA; 12
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Homo sapiens

22-FEB-2002

ABI56394

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central nervous system, cardiovascular and metabolic disorders. The

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Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
              ligonucleotides, useful for diagnosis and cell typing, :
to detect single-nucleotide polymorphisms and cytosine
                                                Claim 1; SEQ ID NO 363823; 29pp + Sequence Listing; German.
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acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC09989, ABF00010-ABF9989, ABF00010-ABF9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
               oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF0010-ABF99889, ABH0010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at first part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                      This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABH99999 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but fire wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Oligonucleotide primer SEQ ID NO 373793 for detecting SNP TSC0060321

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABH99899 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                     Oligonucleotide primer SEQ ID NO 303856 for detecting SNP TSC0020677.
                            Gaps
                          0;
13.7%; Score 10; DB 1; Length 12; 100.0%; Pred. No. 1e+03; Ative 0; Mismatches 0; Indels
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944 TIGGITIAAT 953

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(first entry)

22-FEB-2002

ABI73820;

:I73820 | ABI73820 standard; DNA; 12

SULT 707

18-OCT-2001.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABE99899, ABF00010-ABE99899 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but fur wipo.int/pub/published_pct_sequences

Sequence 12 BP; 3 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

Query Match

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Х; Berlin

Piepenbrock C,

olek A,

WPI; 2001-657177/75

(EPIG-) EPIGENOMICS AG

06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173

WO200177384-A2

18-OCT-2001

Homo sapiens.

Claim 1; SEQ ID NO 373793; 29pp + Sequence Listing; German.

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                                                                                                                                                                                                                                                                 This invention describes novel oligonucleotide primers or peptide nucleic
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designed to detect single-nucleotide polymorphisms and cytosine
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Claim 1; SEQ ID NO 310307; 29pp + Sequence Listing; German.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989 and ABI00010-ABE3073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic formmat from WIPO at
                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                     Oligonucleotide primer SEQ ID NO 291711 for detecting SNP TSC0014907.
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ttive 0; Mismatches 0
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                                                                     ABH91718 standard; DNA; 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                              Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
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CNS;
                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer;
                                                                                                                                                                                                                                                             Oligonucleotide SEQ ID NO 85765 for detecting SNP TSC0021549.
:748/c
ABC85748 standard; DNA; 13 BP.
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944 TTGGTTTAAT 953

3 TTGGTTTAAT 12

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Gaps

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Length 12; 0; Indels 18

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes novel oligonucleotide primers or peptide nuclei acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                 Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide SEQ ID NO 204471 for detecting SNP TSC0050159.
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                                                                                                                           Claim 1; SEQ ID NO 138700; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                     13.7%; Score 10; DB 1; Length 13; 100.0%; Pred. No. 1e+03;
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                                                                                                                                                                                                                                                                                                                                            Sequence 13 BP; 2 A; 4 C; 0 G; 6 T; 0 U; 1 Other;
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           Berlin K;
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           Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                              925 CTTTTATCCC 934
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                                        WPI; 2001-657177/75.
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                                                                                                methylation status.
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           olek A,
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central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 85765; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13.7%; Score 10; DB 1; Length 13; 100.0%; Pred. No. 1e+03; ative 0; Mismatches 0; Indels
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                                                                                                              06-APR-2001; 2001WO-IB000713.
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Best Local Similarity
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                            Homo sapiens
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13.7%; Score 10; DB 1; Length 13; 100.0%; Pred. No. 1e+03; ive 0; Mismatches 0; Indels

Query Match
Best Local Similarity 100.
Matches 10; Conservative

929 TATCCCTCCT 938

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2 TATCCCTCCT

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and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention, NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                          Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                was obtained in electronic format from WI ftp.wipo.int/pub/published_pct_sequences
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Best Local Similarity 100.
Matches 10; Conservative
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Oligonucleotide SEQ ID NO 45871 for detecting SNP TSC0013320.

(first entry)

21-FEB-2002

ABC45854;

BP.

ABC45854 standard; DNA; 13

RESULT 717

ABC45854

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                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989 and ABI00010-ABE3073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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This invention describes novel oligonuclectide primers or peptide nucleic acid (RNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic discorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the vibo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 6 C; 0 G; 4 T; 0 U; 0 Other;

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

WPI; 2001-657177/75.

Claim 1; SEQ ID NO 180942; 29pp + Sequence Listing; German.

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine

Ŗ, Berlin

Piepenbrock C,

Olek A,

WPI; 2001-657177/75.

methylation status.

(EPIG-) EPIGENOMICS AG

06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173.

WO200177384-A2. Homo sapiens.

18-OCT-2001.

ABC47695;

schultz1-899.rng

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                         set or oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                     Oligonucleotide SEQ ID NO 47712 for detecting SNP TSC0013678.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 47712; 29pp + Sequence Listing; German.
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                                  21-FEB-2002 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 102346; 29pp + Sequence Listing; German.
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                                         06-APR-2001; 2001WO-IB000713.
                                                                          07-APR-2000; 2000DE-01019173.
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nes 10; Conservative
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                                                                                                                                                                                                                                   methylation status.
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Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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Claim 1; SEQ ID NO 104502; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretracted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABF99989, ABH00010-ABH99899 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 8 A; 3 C; 1 G; 0 T; 0 U; 1 Other;

Gaps ·. 13.7%; Score 10; DB 1; Length 13; 83.3%; Pred. No. 1e+03; 1; Indels 1; Mismatches Conservative Best Local Similarity 10; Query Match Matches

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908 TITICITIGGIC 919

3C54943/c SULT 721

BP. ABC54943 standard; DNA; 13

ABC54943;

(first entry) 21-FEB-2002

ID NO 54960 for detecting SNP TSC0015048. Oligonucleotide SEQ

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 54960; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, asstronintestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010

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-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the Oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                Length 13;
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                                                                                                              Sequence 13 BP; 8 A; 2 C; 0 G; 2 T; 0 U; 1 Other;
                                                                                                                                                Score 10; DB 1;
Pred. No. 1e+03;
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Matches 10; Conservative
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ABF09013/c
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Gaps ., DB 1; Length 13; 1e+03; thes 0; Indels Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other; 13.7%; Scor. 100.0%; Pred. No. 1c. 10; Conservative Query Match Best Local Similarity Matches

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TTTAATGTAT 957

Mon Oct 18 14:40:13 2004

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but typ.wipo.int/pub/published_pct_sequences
                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                        Oligonucleotide SEQ ID NO 59046 for detecting SNP TSC0015825.
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ABC59029 standard; DNA; 13 BP
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            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, and ABL00010-ABIS2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but two obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Matches 10; Conservative
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                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 145130; 29pp + Sequence Listing; German.
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07-APR-2000; 2000DE-01019173
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nes 10; Conservative
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                                                                                            Piepenbrock C,
                                          (EPIG-) EPIGENOMICS AG.
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Claim 1; SEQ ID NO 220171; 29pp + Sequence Listing; German.

RESULT 728

ABH06011

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                              Oligonucleotide SEQ ID NO 232093 for detecting SNP TSC0056602.
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                       ABH32116 standard; DNA; 13
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Matches 10, Conservative
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                                                              13.7%; Score 10; DB 1; Length 13; 100.0%; Pred. No. 1e+03; trive 0; Mismatches 0; Indels
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                   Sequence 13 BP; 9 A; 0 C; 3 G; 1 T; 0 U; 0 Other;
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                                                            oet or oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                           Claim 1; SEQ ID NO 44956; 29pp + Sequence Listing; German.
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Matches 10; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABR00010-ABR9989, ABR00010-ABR9989, ABR00010-ABR9989, and ABI00010-ABR9980 and ABI00010-ABR9980 are for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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WO200177384-A2. Homo sapiens.

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central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABCC0010-ABC99989, ABF001010-ABB99989 and ABF0010-ABB19989 and ABF0010-ABB199989 are present the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the print of pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          oet or oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide SEQ ID NO 98245 for detecting SNP TSC0024404.
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Pred. No. 1e+03;
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                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                           Oligonucleotide SEQ ID NO 3467 for detecting SNP TSC0001294.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABE99898, ABF00010-ABE99898, ABF00010-ABE99899 and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence
                                                                                                acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABP9989, ABF00010-ABP9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                  This invention describes novel oligonucleotide primers or peptide nucleic
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                                      Claim 1; SEQ ID NO 199920; 29pp + Sequence Listing; German.
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designed to detect single-nucleotide polymorphisms and cytosine
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data for this patent did not form part of the pass obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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Best Local Similarity 100.
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                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cancer also vsed for addiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire.wipo.int/pub/published_pct_sequences
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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC09989, ABC0010-ABH99989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire wipo.int/pub/published_pct_sequences
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nes 10; Conservative
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABH99999 and ABI00010-ABI22073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                   Oligonucleotide SEQ ID NO 64114 for detecting SNP TSC0016920.
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100.0%; Pred. No. 1c.
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                                                                                                                                                                                                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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WO200177384-A2
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, coligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                    designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                 and cell typing,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide SEQ ID NO 145129 for detecting SNP TSC0036516.
                                                                                                             Claim 1; SEQ ID NO 218282; 29pp + Sequence Listing; German.
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                     of oligonucleotides, useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Berlin K;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but fire wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 125025; 29pp + Sequence Listing; German.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

Berlin K;

Claim 1; SEQ ID NO 145129; 29pp + Sequence Listing; German.

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oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99899, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                         Query Match 13.7%; Score 10; DB 1; Length 13; Best Local Similarity 83.3%; Pred. No. 1e+03; Matches 10; Conservative 1; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                      Sequence 13 BP; 1 A; 1 C; 2 G; 8 T; 0 U; 1 Other;
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABC0010-ABF99899, ABC0010-ABF99989, ABC0010-ABF99989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at
                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                          Oligonucleotide SEQ ID NO 202130 for detecting SNP TSC0049691.
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                                                                                       RESULT 751
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                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 204309 for detecting SNP TSC0050117.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABE99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Claim 1; SEQ ID NO 247940; 29pp + Sequence Listing; German
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set or oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF9989 and ABI00010-ABI92073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Claim 1; SEQ ID NO 259052; 29pp + Sequence Listing; German.

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                                                                                                                                                                                                 Oligonucleotide SEQ ID NO 94001 for detecting SNP TSC0023487.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 94002; 29pp + Sequence Listing; German.
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Piepenbrock C,

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABL00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                   Claim 1; SEQ ID NO 101973; 29pp + Sequence Listing; German
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oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fitch.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABR00010-ABF99899, ABR00010-ABH99899 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at
                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                     Oligonucleotide SEQ ID NO 183108 for detecting SNP TSC0000589.
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                                                                                                                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo int/pub/published_pct_sequences
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     designed to detect single-nucleotide polymorphisms and cytosine
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                          Claim 1; SEQ ID NO 31718; 29pp + Sequence Listing; German
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Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Set of oligonucleotides, useful for diagnosis and cell typing, addesigned to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                       ABC85749 standard; DNA; 13 BP
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represent the oligomers described in the invention. NOTE: The sequence data for this parent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                 13.7%; Score 10; DB 1; Length 13; 100.0%; Pred. No. 1e+03; ive 0; Mismatches 0; Indels
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Best Local Similarity 100.
Matches 10; Conservative
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Gaps

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Oligonucleotide SEQ ID NO 86895 for detecting SNP TSC0021828.

923 GCCTTTTATCCC 934

Matches

German,

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010, ABC99989, ABF00010-ABF99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                           Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 118107; 29pp + Sequence Listing;
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Best Local Similarity 83.3
Matches 10; Conservative
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                                                                       Piepenbrock C,
                             (EPIG-) EPIGENOMICS AG
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Best Local Similarity 100.
Matches 10; Conservative
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Gaps

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1; Indels

1; Mismatches

BP.

Score 10; DB 1; Length 13; Pred. No. 1e+03;

13.7%; 83.3%;

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                Oligonucleotide SEQ ID NO 118108 for detecting SNP TSC0029535.
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Score 10; DB 1; Length 13; Pred. No. 1e+03;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
               acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH82073 tepresent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
  invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Matches 10; Conservative
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                                                                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                    Gaps
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                             13.7%; Score 10; DB 1; Length 13; 100.0%; Pred. No. 1e+03; cive 0; Mismatches 0; Indels
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Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
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tive 0; Mismatches
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                                                                                                     948 TITAATGIAT 957
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ABF38702/c
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RESULT 774 ABH22127/c

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                                                                                                                                                         peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                   Oligonucleotide SEQ ID NO 222104 for detecting SNP TSC0054046.
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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABP9999, ABF00010-ABF9999, ABF00010-ABF99999, ABF00010-ABF9999, ABF00010-ABF9999, ABF00010-ABF9999, ABF00010-ABF9999, ABF00010-ABF9999, ABF9999, ABF9999, ABF9999, ABF99999, ABF9999, ABF9999, ABF9999, ABF9999, ABF9999, ABF9999, ABF99999, ABF9999, ABF9999, ABF9999, ABF9999, ABF9999, ABF9999, ABF99999, ABF9999, ABF9
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ABC47694/c
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WPI; 2001-657177/75

describes novel oligonucleotide primers

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designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                  Claim 1; SEQ ID NO 47711; 29pp + Sequence Listing; German.
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                                                                   This invention
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Matches
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(first entry)

Berlin

13.7%; Score 10; DB 1; Length 13; 100.0%; Pred. No. 1e+03;

0; Mismatches

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0; Indels

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acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073
central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF0010-ABF99889, ABF00010-ABF99889, ABF00010-ABF9989, ABF000010-ABF9989, ABF9989, ABF99899, AB
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                                                                                                                                                                                                                                                                                                                                                                          or peptide nucleic
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                       ABF36794 standard; DNA; 13 BP.
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948 TITAATGTAT 957
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretracted genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010, ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences

Claim 1; SEQ ID NO 136791; 29pp + Sequence Listing; German.

Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

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Match 13.7%; Score 10; DB 1; Length 13; Local Similarity 100.0%; Pred. No. 10+03; les 10; Conservative 0; Mismatches 0; Indels
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11 TTTAATGTAT

ABH22126 standard; DNA; 13 ABH22126; SULT 780

BP.

(first entry) 22-FEB-2002

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF82073
                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                 Oligonucleotide SEQ ID NO 222103 for detecting SNP TSC0054046.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 222103; 29pp + Sequence Listing; German.
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Gaps 0; Oligonucleotide SEQ ID NO 180418 for detecting SNP TSC0007140. BP. ABF80421 standard; DNA; 13 (first entry) 907 ATTTTCTTTGGT 918 Conservative ATTTTGTTTGGY 13 Local Similarity les 10; Conserv 22-FEB-2002 ABF80421; ABF80421/c RESULT 781 Matches ð a

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

WO200177384-A2

18-OCT-2001.

Homo sapiens

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99899, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 180418; 29pp + Sequence Listing; German.
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06-APR-2001; 2001WO-IB000713.
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                                                                                                                                                                                                                                                                                                                                                                                                 methylation status.
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ABH54691/c
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                                                                                                                   acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a
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                                                                                      This invention describes novel oligonuclectide primers or peptide nucleic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide SEQ ID NO 52279 for detecting SNP TSC0014529.
                         Claim 1; SEQ ID NO 254668; 29pp + Sequence Listing; German.
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methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                13.7%; Score 10; DB 1; Length 13; 100.0%; Pred. No. 1e+03; cive 0; Mismatches 0; Indels
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Pred. No. 1e+03;
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83.3%;
ABF13833 standard; DNA; 13
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascullar and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99899 and ABI00010-ABI32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 126971; 29pp + Sequence Listing; German.
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83.3%;
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                            Olek A, Piepenbrock C,
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central nervous system; gastrointestinal; respiratory; immune; metabolic.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

ID NO 135910 for detecting SNP TSC0033934.

Oligonucleotide SEQ

Homo sapiens.

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 135910; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF0010-ABF9989, and nthe invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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100.0%; Pred. No. 1e+03;
ive 0; Mismatches 0; Indels
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Berlin K;

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WPI; 2001-657177/75

06-APR-2001; 2001WO-IB000713.

18-OCT-2001.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                   oligonucleotides, useful for diagnosis and cell typing, is to detect single-nucleotide polymorphisms and cytosine
                                      Oligonucleotide SEQ ID NO 202129 for detecting SNP TSC0049691.
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                  22-FEB-2002 (first entry)
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                                                                                                     Homo sapiens
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABH00010-ABH99989 and ABL00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences Gaps . Score 10; DB 1; Length 13; Pred. No. 1e+03; Sequence 13 BP; 9 A; 0 C; 2 G; 2 T; 0 U; 0 Other; 13.7%; Scc... v 100.0%; Pred. No. L... o; Mismatches Similarity Query Match Best Local Simi Matches 10;

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ABH04495 standard; DNA; 13 BP. ABH04495; RESULT 792 ABH04495/c

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 204472 for detecting SNP TSC0050159.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

WO200177384-A2

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                                                                                                                                                                                                                   designed to detect single-nucleotide polymorphisms and cytosine
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Set of oligonuclectides, useful for diagnosis and cell typing, is designed to detect single-nuclectide polymorphisms and cytosine methylation status.
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Claim 1; SEQ ID NO 259055; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but two obtained in electronic format from WIPO at

Sequence 13 BP; 5 A; 1 C; 2 G; 4 T; 0 U; 1 Other;

Query Match
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps

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947 GTTTAATGTATC 958 :||||| ||||| 13 RTTTAACGTATC 2

SULT 794 C19221/c

ABC19221 standard; DNA; 13

BP.

ABC19221;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 19238 for detecting SNP TSC0004017.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 19238; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010

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13.7%; Score 10; DB 1; Length 13; 100.0%; Pred. No. 1e+03; Live 0; Mismatches 0; Indels

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-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NoTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                ABC45855 standard; DNA; 13 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic forme from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels
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ABF09290
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                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 3468; 29pp + Sequence Listing; German.
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                                                                                                   Berlin K;
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ABC35308 standard; DNA; 13 BP
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                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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               G; 6 T; 0 U; 1 Other;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formme from WIPO at SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Gaps Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine ., Oligonucleotide SEQ ID NO 174913 for detecting SNP TSC0043493. Oligonucleotide SEQ ID NO 35325 for detecting SNP TSC0011192. Claim 1; SEQ ID NO 35325; 29pp + Sequence Listing; German. 13.7%; Score 10; DB 1; Length 13; 83.3%; Pred. No. 1e+03; 1; Indels Sequence 13 BP; 4 A; 0 C; 5 G; 3 T; 0 U; 1 Other; 1; Mismatches was obtained in electronic format from W1 ftp.wipo.int/pub/published_pct_sequences Berlin K;

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RESULT 802

Query Match

Homo sapiens.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC09989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
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                                                                 oligonucleotides, useful for diagnosis and cell typing, ied to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99899, ABF00010-ABF99899 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 174913; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 10; DB 1; Length 13;
Pred. No. 1e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                 methylation status.
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Matches 10; Conserv
                                         WO200177384-A2.
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WO200177384-A2

18-OCT-2001

Olek A,

Homo sapiens.

21-FEB-2002

ABF52555;

SULT 804

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligoners for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer, CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                    Seguence 13 BP; 3 A; 2 C; 0 G; 8 T; 0 U; 0 Other;
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Best Local Similarity
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Length 13;

Score 10; DB 1; Pred. No. 1e+03;

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Query Match Best Local Similarity

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                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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20-FEB-2002 (first entry)

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 tepresent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but they bublished pre_sequences
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                                                                                                                                                                                                                                                                                                                                                                  Claim 1; SEQ ID NO 50981; 29pp + Sequence Listing; German
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                         06-APR-2001; 2001WO-IB000713
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                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                           Oligonucleotide SEQ ID NO 26081 for detecting SNP TSC0006747.
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봈. Berlin

Olek A, Piepenbrock C,

WPI; 2001-657177/75.

methylation status.

(EPIG-) EPIGENOMICS AG.

06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173

WO200177384-A2.

18-OCT-2001

Homo sapiens.

100.0%; Prec. ...

10; Conservative

Local Similarity

Query Match Best Local S

Matches

906 CATTITCTTT 915

N

11 CATTTTTT

ABC50964 standard; DNA; 13 BP.

SULT 809

C50964

(first entry)

21-FEB-2002

ABC50964;

WO200177384-A2

18-OCT-2001

Homo sapiens

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Gaps

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methylation status.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                        Claim 1; SEQ ID NO 132036; 29pp + Sequence Listing; German.
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                                                                                                      13.7%; Score 10; DB 1; Length 13; 83.3%; Pred. No. 1e+03; 1; Indels iive 1; Mismatches 1; Indels
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                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

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peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                     Claim 1; SEQ ID NO 113829; 29pp + Sequence Listing; German.
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                        Berlin K;
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Matches 10; Conservative
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                        Olek A, Piepenbrock C,
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(EPIG-) EPIGENOMICS AG
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                                                                                              methylation status.
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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, azdiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Matches 10; Conservative
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                                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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              13.7%; Score 10; DB 100.0%; Pred. No. 1e+
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Matches 10; Conservative
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                                                                                 955 TATCGCTACC 964
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               Query Match
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3SULT 819 3H61067/c > ABH61067 standard; DNA; 13 BP.

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                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 261044 for detecting SNP TSC0063384.
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Best Local Similarity 100.
Matches 10, Conservative
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WO200177384-A2

German.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                        Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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Pred. No. 1e+03;
0; Mismatches 0; Indels
                                                                                                                                             ID NO 86896; 29pp + Sequence Listing;
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                                                                                                                                             Claim 1; SEQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes novel oligonucleotide primers or peptide nucleic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 27489; 29pp + Sequence Listing; German.
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oligomers are also used for detecting cell type differentiation. ABC00010 -ABC39989, ABF0010-ABF99889, ABH00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine

ĸ Berlin

Piepenbrock C,

olek A,

WPI; 2001-657177/75.

methylation status.

(EPIG-) EPIGENOMICS AG

06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173

WO200177384-A2. Homo sapiens.

18-OCT-2001

peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

Oligonucleotide SEQ ID NO 71263 for detecting SNP TSC0018464

(first entry)

21-FEB-2002

ABC71246;

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ABC71246 standard; DNA; 13

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Sequence 13 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 1 Other;

ftp.wipo.int/pub/published_pct_sequences

Oligonucleotide SEQ ID NO 118106 for detecting SNP TSC0029535.

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This invention describes novel oligonucleotide primers or peptide nucleicacid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABH99989 and ABIO0010-ABB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                      olek A,
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                             Oligonucleotide SEQ ID NO 169461 for detecting SNP TSC0042329.
                                                                                                                                                                                                                                                                                                                    Berlin K;
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                                                                                                                                                                                                                                            06-APR-2001; 2001WO-IB000713
                                                                                                                                                                                                                                                                    07-APR-2000; 2000DE-01019173
                      ABF69464 standard; DNA; 13
                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                  Piepenbrock C,
                                                                                                                                                                                                                                                                                          (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                          WPI; 2001-657177/75
                                                                                                                                                                                            WO200177384-A2
                                                                                                                                                                    Homo sapiens
                                                                     22-FEB-2002
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                                               ABF69464;
                                                                                                                                                                                                                                                                                                                  olek A,
RESULT 827
            ABF69464
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                                                                     Gaps
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                                            Length 13;
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                                                                                                                                                                                                                                                                                                         acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligometedides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABR99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at
                                                                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
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                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 118582; 29pp + Sequence Listing; German.
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Pred. No. 1e+03;
0; Mismatches 0; Indels
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100.0%; Pred. No. 10.
... 0; Mismatches
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                                                                                                Berlin K;
                  07-APR-2000; 2000DE-01019173.
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Matches 10; Conservative
                                                                                                                                                                        Set of oligonucleotides,
                                                                                                Piepenbrock C,
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                                                     (EPIG-) EPIGENOMICS AG
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13 TTTAATGTAT
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                                                                                                                                                                                                                   methylation status
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Gaps

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABF9989 and ABI00010-ABF2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; 5s; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide SEQ ID NO 169930 for detecting SNP TSC0006683.
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                                                                                                  Score 10; DB 1; Length 13;
Pred. No. 1e+03;
0; Mismatches 0; Indels
                                                 Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
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100.0%; Pred. No. 1e+03;
:ive 0; Mismatches 0
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100.0%; Pred. No. 100.0%; O; Mismatches
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ftp.wipo.int/pub/published_pct_sequences
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Best Local Similarity
Matches 10; Conserv
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Matches
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                                              This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and oytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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        Claim 1; SEQ ID NO 169461; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 13 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 1 Other;
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les 10; Conservative
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22-FEB-2002

ABF69932;

SSULT 828

Query Match

Matches

18-OCT-2001

Olek A,

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Gaps

0

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Length 13;

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                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                    ABF70153 standard; DNA; 13 BP
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABR00010-ABF9989, ABR00010-ABF9989, and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13.7%; Score 10; DB 1; Length 13; 83.3%; Pred. No. 1e+03;
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                                                                                                                                                                      (EPIG-) EPIGENOMICS AG
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                                                                                                                                                                                                                                                                                                methylation status.
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              Homo sapiens.
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                                                                                                                                                                                 This invention describes novel oligonucleotide primers or peptide nucleic acid (RNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, azadiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABE9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                   Claim 1; SEQ ID NO 27072; 29pp + Sequence Listing; German
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   Berlin K;
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   A, Piepenbrock
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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomera ealso used for detecting call type differentiation. ABC00010-ABC99989, ABC0010-ABF9989, ABH0010-ABH99899 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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Pred. No. 1e+03;
1; Mismatches 1; Indels
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ftp.wipo.int/pub/published_pct_sequences
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Les 10; Conservative
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                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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 83.3%;
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Best Local Similarity 83.3
Matches 10; Conservative
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                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                 Oligonucleotide SEQ ID NO 63828 for detecting SNP TSC0016855.
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Conservative 0; Mismatches
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                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 118581; 29pp + Sequence Listing; German.
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                                                                                                                               Berlin K;
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                                06-APR-2001; 2001WO-IB000713.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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detect single-nucleotide polymorphisms and cytosine
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                                                                                                                 + Sequence Listing;
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Thes 10; Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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83.3%;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                      Claim 1; SEQ ID NO 254667; 29pp + Sequence Listing; German.
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                                                  Piepenbrock C,
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                 (EPIG-) EPIGENOMICS AG
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                                                                                                                                                       methylation status.
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Best Local Similarity
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Sequence 13 BP; 1 A; 5 C; 0 G; 6 T; 0 U; 1 Other;

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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Matches 10; Conservative
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designed to detect single-nucleotide polymorphisms and cytosine
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13.7%; Score 10; DB 1; Length 13; 83.3%; Pred. No. 1e+03;
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RESULT 847 ABC31895/c

WO200177384-A2 Homo sapiens.

18-OCT-2001

Olek A,

20-FEB-2002

ABC31895;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 194200; 29pp + Sequence Listing; German.
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                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                    Oligonucleotide SEQ ID NO 31912 for detecting SNP TSC0009939.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      was obtained in electronic format from Wiftp.wipo.int/pub/published_pct_sequences
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ABC31895 standard; DNA; 13
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Query Match Best Local Similarity

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine Claim 1; SEQ ID NO 172020; 29pp + Sequence Listing; German. 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173. Olek A, Piepenbrock C, (EPIG-) EPIGENOMICS AG. WPI; 2001-657177/75. methylation status. Local Similarity methylation status WO200177384-A2. 22-FEB-2002 18-OCT-2001 ABF72023; designed Query Match RESULT 850 ABF72023/c Homo Matches ें q

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central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF0010-ABF99989, ABF0010-ABF99989 and ABI0010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at figure.
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                                                                                                                                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                             Set of oligonucleotides, useful for diagnosis and cell typing,
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                                                                                                                                                                           Claim 1; SEQ ID NO 172019; 29pp + Sequence Listing; German.
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF99899 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                       Oligonucleotide SEQ ID NO 223289 for detecting SNP TSC0005484.
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                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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ABC20522 standard; DNA; 13 BP.

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                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 20539 for detecting SNP TSC0004187.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Berlin K;
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les 10; Conservative
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Best Local S:
Matches 10,
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06-APR-2001; 2001WO-IB000713.

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                                                                                                                                                                                                                                                             This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                             ligonucleotides, useful for diagnosis and cell typing, is to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                            Claim 1; SEQ ID NO 101974; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13.7%; Score 10; DB 1; Length 13; 100.0%; Pred. No. 1e+03; tive 0; Mismatches 0; Indels
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                                                                                               Berlin K;
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                                                                                              Olek A, Piepenbrock C,
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les 10; Conserv
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                                                                        acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically precreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory. Central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABF09989, ABF00010-ABF9989, ABH0010-ABF9989, ABH0010-ABF9989, BPI only and ABIOONIO-ABF9980, Cancer the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
                                                         This invention describes novel oligonuclectide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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              Claim 1; SEQ ID NO 102345; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 109009; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                            13.7%; Score 10; DB 1; Length 13; 83.3%; Pred. No. 1e+03;
                                                                                                                                                                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                        Sequence 13 BP; 9 A; 0 C; 2 G; 1 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                         1; Mismatches
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Query Match

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABC0010-ABF99889, ABH0010-ABH99989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in circum from MIPO at
                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                               Oligonucleotide SEQ ID NO 218281 for detecting SNP TSC0053061.
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Pred. No. 1e+03;
0; Mismatches 0; Indels
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100.0%; Pred. No. ...
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                                                                     ABH18304 standard; DNA; 13
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Best Local Similarity
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ABF97924/i
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AC ABF9
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CDE Olig
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KW SNP;
KW PEPC:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                 13.7%; Score 10; DB 1; Length 13; 100.0%; Pred. No. 1e+03; ive 0; Mismatches 0; Indels
                                                                   Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;
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was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                      ABF35912 standard; DNA; 13 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                         Best Local Similarity 100.
Matches 10; Conservative
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                                                                                                                                                                                                            948 TITAATGTAT 957
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Best Local Similarity
Matches 10; Conserv
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Homo sapiens.

18-OCT-2001.

21-FEB-2002

ABF35912;

SULT 857 F35912 0

Gaps

0;

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Set of oligonucleotides, useful for diagnosis and cell typing, i
designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                              Claim 1; SEQ ID NO 203488; 29pp + Sequence Listing; German.
               Berlin K;
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               Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                              905 TCATTTTCTT 914
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Triple-helix forming
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                                       WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                         methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hepatitis B virus.
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                                                                                                                                                                                                                                                                                               This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABE99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                          Set of oligonucleotides, useful for diagnosis and cell typing, addesigned to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligonucleotide SEQ ID NO 203488 for detecting SNP TSC0049964.
                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 197921; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13.7%; Score 10; DB 1; Length 13; 100.0%; Pred. No. 1e+03; Ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 13 BP; 5 A; 0 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                         ftp.wipo.int/pub/published pct sequences
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                                                                                                                                                                                                                                                   methylation status.
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Best Local Similarity
Matches 10; Conserv
                                                WO200177384-A2.
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                          Homo sapiens.
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                                                                          18-OCT-2001
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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It can be used to demonstrate the assay of the invention. The assay
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Triple helix forming nucleotides 1810-1823 of Hepatitis B virus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Iriple-helix forming region; Triplex formation; DNA detection;
identification; bacteria; oncogene; virus; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13.7%; Score 10; DB 1;
100.0%; Pred. No. 1e+03;
:ive 0; Mismatches 0
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comprises adding a sample containing double-stranded DNA test sequences, e.g. contraining the present sequence, to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is sequence. DNA, where either a part of the anchor DNA or reporter DNA sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test which is detected as an indication of detect DNA sequence, The method is used to detect DNA sequences, particularly for identification of bacteria genes for ribosomal RNA) in clinical samples, but also detection of oncogenes and Hepatitis B virus

Sequence 14 BP; 1 A; 6 C; 0 G; 7 T; 0 U; 0 Other;

Gaps ·, DB 1; Length 14; 1.1e+03; hes 0; Indels Query Match
13.7%; Score 10; DB:
Best Local Similarity 100.0%; Pred. No. 1.1
Matches 10; Conservative 0; Mismatches

SULT 862

AAX14810 standard; DNA; 14 BP. X14810

AAX14810;

(first entry) 24-MAR-1999 Triple helix forming nucleotides 274-287 of Hepatitis B virus.

Triple-helix forming region; Triplex formation; DNA detection; identification; bacteria; oncogene; virus; ds.

Hepatitis B virus.

19-JAN-1999

US5861244-A.

93US-00173489. 22-DEC-1993; 92US-00968436 29-OCT-1992;

(PROF-) PROFILE DIAGNOSTIC SCI INC.

Wang C; Hepburn AG,

WPI; 1999-130384/11.

Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify bacteria.

Disclosure; Col 19-20; 168pp; English.

The present sequence represents a potential triple-helix forming region. It can be used to demonstrate the assay of the invention. The assay of comprises adding a sample containing double-stranded DNA test sequences, e.g. containing the present sequence, to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (DN detecting genes for ribosomal RNA) in clinical samples, but also detection of oncogenes and Hepatitis B virus

Sequence 14 BP; 1 A; 6 C; 0 G; 7 T; 0 U; 0 Other;

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                                 Gaps
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   Length 14;
   13.7%; Score 10; DB 1; L. 100.0%; Pred. No. 1.1e+03; ive 0; Mismatches 0;
Query Match
Best Local Similarity 100.
Matches 10, Conservative
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935 TCCTCTTCAT 944 2 recreirear

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RESULT 863

BP. AAH76180 standard; DNA; 14

AAH76180/

AAH76180;

29-OCT-2001 (first entry)

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Region of ALC locus after Ds

SGT10166; dehiscence; indehiscent; pod shattering; agronomic; transgenic; ALC locus; ss.

Arabidopsis thaliana.

WO200159122-A1.

16-AUG-2001.

01-FEB-2001; 2001WO-SG000017.

11-FEB-2000; 2000WO-SG000022.

(MOLE-) INST MOLECULAR AGROBIOLOGY.

Sundaresan V, Rajani

WPI; 2001-514672/56.

New gene from Arabidopsis thaliana involved in dehiscence and mutations in the gene which prevents dehiscence of mature fruit in plants, useful for producing indehiscent transgenic plants.

Example 4; Fig 5; 74pp; English.

The invention relates to the STG10166 polypeptide from A. thaliana.

Mutations in STG10166 game prevent dehiscence of mature fruit. A
recombinant SGT10166 bNA molecule is capable of altering dehiscence of a
mature fruit in plants which produce seed pods, by antisense or sense
comparession mechanism and is useful for producing indehiscent transgenic
plants. SGT10166 gene is useful for producing indehiscent transgenic
comparession mechanism and is useful for producing indehiscent transgenic
comparession mechanism and is useful for producing plants.

CC plants. SGT10166 gene is useful for producing dehiscence which leads to significant
care seed loss during harvesting of crops. This is of agronomic importance in
crops such as oil seed rape (Brassica napus). Prokaryotic or cukaryotic
ccols transformed with the polynuclectides are useful for producing
ccols propeptides and in studying the characteristics of SGT10166
solypeptides. Plants having modified dehiscence phenotypes can be used
ccols fruit tissue in plants study of the formation and differentiation of
fruit tissue in plants. The probes and primers based on the SGT10166 gene
ccols grants/prognostic methods, such as predicting reproducity
condiagnostic/prognostic methods such as predicting reproducing and
condiagnostic/prognostic methods for the condiagnostic met

Sequence 14 BP; 5 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

13.7%; Score 10; DB 1; Length 14; 100.0%; Pred. No. 1.1e+03; Query Match Best Local Similarity

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Length 14;

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The invention relates to an isolated nucleic acid (NI) comprising at preast 20 but not more than 1500 consecutive nucleotides of the optineurin promoter appearing as ADE13890. Also included are the optineurin promoter appearing as ADE13890. Also included are the optineurin promoter. A lost call comprising the promoter operably linked to a heterologues nucleic acid, a nucleic acid capable of promoter, a host cell comprising the promoter operably linked to a heterologue sequence, diagnosing or prognosing glaucoma in a sample obtained from a cell or bodily fluid (comprising detecting a polymorphism in a promoter region of the optineurin gene, associated with a glaucoma phenotype), detecting a SNP sequence variation in a sample containing DNA, detecting the presence of an optineurin promoter sequence variation in a sample containing on a sample containing in a sample containing of the presence of an optineurin promoter sequence variation as aspectibility to glaucoma or to a progressive ocular hypertensive discontaining in loss of visual field in a patient (or the severity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New nucleic acid sequences of the optineurin gene are useful to detect polymorphisms particularly single nucleotide polymorphisms in the optineurin promoter to diagnose, prognose and treat glaucoma and related
                                                                                                                                                                                                                                                                                       Human, optineurin, ds, ophthalmological; single nucleotide polymorphism; SNP; glaucoma; progressive ocular hypertensive disorder; glaucoma related disorder; motif; repeat element; regulatory region.
 Gaps
                                                                                                                                                                                                                                                        Optineurin promoter motif, repeat element or regulatory region #434.
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 Indels
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 Mismatches
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Conservative
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(RAYM/) RAYMOND V.
(MORI/) MORISSETTE J.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  disorders
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                                                                                                                   ESULT 864
Matches
                                                                                                                                   ADE14325,
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or progression of glaucoma in a patient, comprising providing amplification reaction primers that direct amplification of a selected nucleic acid region containing the variation within the optineurin promoter and amplifying the DMA) and detecting a polymorphism (comprising obtaining a sample containing human genomic DNA, providing a nucleic acid detecting the polymorphism). The invention is used to diagnose and prognose glaucoma and also to treat glaucoma related disorders, The present sequence is an optineurin promoter motif, repeat element or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 14 BP; 5 A; 0 C; 9 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           putative regulatory region.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention describes a novel enzymatic nucleic acid (ENA) having a hammerhead motif (HM) comprising; (i) at least 5 ribose residues; (ii) a 2-C-allyl modification at position 4 of the ENA; (iii) at least ten 2-O-methyl modification; and (iv) a 3'-end modification. The ENA's membrane of joints for the treatment or prevention in the synovial particularly osteoarthritis or rheumatoid arthritis. The ENA's can also be used to treat antigen presenting cells of a donor to induce tolerance in a recipient to an alloantigen of a donor. They can also be used to treat to an alloantigen of a donor. They can also be used for enhanding graft tolerance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also be used in diagnosis. Ribozyme therapy impacts on the expression of stromedlysin without introducing the non-specific effects upon gene expression which accompany treatment with retinoids and dexamethasone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Enzymatic nucleic acid molecules having a hammer-head motif - used for
the treatment of arthritis, induction of graft tolerance or treatment of
                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stinchcomb DT, Jarvis T, Draper K, Pavco P;
Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
Thompson JD, Modak A, Burgin A;
                                     ..
                                   0; Indels
                                                                                                                                                                                                                                                                                           Mouse CD40 hammerhead ribozyme target SEQ ID NO:3396.
13.7%; Score 10; DB 1; Le
100.0%; Pred. No. 1.1e+03;
iive 0; Mismatches 0;
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                                                                                                                                                                                       AAX66764 standard; RNA; 15 BP.
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94US-00363253.
94US-00363254.
95US-00390850.
95US-00426124.
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95US-00434509
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                                                                                                                                                                                                                                                          (first entry)
Query Match 13.7
Best Local Similarity 100.
Matches 10; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                   diagnosis; ss
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Mcswiggen J,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-FEB-1995
20-APR-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-DEC-1994
                                                                                                                                                                                                                         AAX66764;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus sp.
                                                                                                                                                    RESULT 865
                                                                                                                                                                         AAX66764
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Gaps

0;

AAX66763;

SULT 866

Query Match Best Local

Matches

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be used to treat antigen presenting cells of a donor to induce tolerance in a recipient to an alloantigen of a donor. They can also be used for enhancing graft tolerance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also be used in diagnosis. Ribozyme therapy impacts on the expression of stromelysin without introducing the non-specific effects upon gene expression which accompany treatment with retinoids and dexamethasone. The concentration of ribozyme required to affect a therapeutic treatment is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "6-amino-3-prop-1-ynyl-5-hydropyrazolo (3,4-d)pyrimidine-4-one"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "6-amino-3-prop-1-ynyl-5-hydropyrazolo (3,4-d)pyrimidine-4-one"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "6-amino-3-prop-1-ynyl-5-hydropyrazolo (3,4-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /label= OTHER
/note= "6-amino-3-prop-1-ynyl-5-hydropyrazolo
d)pyrimidine-4-one"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "6-amino-3-prop-1-ynyl-5-hydropyrazolo
d)pyrimidine-4-one"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Probe; hybridisation; array; microarray; mismatch; detection;
                                                                                                                                                                                                                                                     Score 10; DB 1; Length 15; Pred. No. 1.1e+03; 5; Mismatches 0; Indels
                                                                                                                                                                                                                     Sequence 15 BP; 0 A; 4 C; 5 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d) pyrimidine-4-one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modified oligonucleotide probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
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/label= OTHER
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/label= OTHER
                                                                                                                                                                                                                                                       13.7%;
50.0%;
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28-NOV-2000; 2000US-00724959.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                              5; Conservative
                                                                                                                                                                                                                                                                                                                              917 GICTITGCCT 926
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                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAI70480 standard;
                                                                                                                                                                                    present invention
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAI70480;
                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 867
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       8x3888888888x8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention describes a novel enzymatic nucleic acid (ENA) having a hammer-head motif (HM) comprising: (i) at least 5 ribose residues; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least ten 2'-O-methyl modifications, and (iv) a 3'-end modification. The ENA's can inhibit collagenase and stromelysin production in the synovial membrane of joints for the treatment or prevention of arthritis, particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Arthritic condition, graft tolerance, immune response; target; cleavage; hammerhead ribozyme; halrpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
       The concentration of ribozyme required to affect a therapeutic treatment is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Enzymatic nucleic acid molecules having a hammer-head motif - used for
the treatment of arthritis, induction of graft tolerance or treatment
auto-immune diseases.
                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           T, Draper K, Pavco P;
Wincott F, Matulic-Adamic
Burgin A;
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0
                                                                                                                              Score 10; DB 1; Length 15; Pred. No. 1.1e+03; 5; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                         Mouse CD40 hammerhead ribozyme target SEQ ID NO:3395.
                                                                                              Seguence 15 BP; 0 A; 4 C; 5 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              r, Jarvis T,
Usman N, Win
Modak A, Bur
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 10; Page 209; 307pp; English.
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94US-00363253.
94US-003908324.
95US-00426124.
95US-00432874.
95US-000951P.
95US-000951P.
95US-000951P.
                                                                                                                                                                                                                                                                                                                               BP.
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                                                                                                                                  13.7%;
50.0%;
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Thompson JD,
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                                                                                                                                                                                                                                                                                                                              AAX66763 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                        entry)
                                                                                                                                                                     5; Conservative
                                                                                                                                                                                                        917 GTCTTTGCCT 926
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4 GUCUUUGCCU 13
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                                                                                                                                                                                                                                                                                                                                                                                                      (first
                                                                                                                                                  Similarity
                                                               present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-DBC-1994;
23-DBC-1994;
23-DBC-1994;
17-FEB-1995;
20-APR-1995;
04-MAY-1995;
07-JUL-1995;
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Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-NOV-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-OCT-1995
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SS.

(3,4-

(3,4-

or polymorphism Matches

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The present sequence is that of an oligomucleotide probe in which 6-amino -3-prop-1-ynyl-5-hydropyrazolo(3,4-d)pyrimidine-4-one (PPG) replaces G. This is one of a set of PPG-modified probes (see AATO465-502) used to illustrate the use of an algorithm, described in the specification, to predict the Tm of modified oligomucleotides containing PPG both with and without a modified groove binder (MGB). In the present case, the accuracy of the prediction algorithm was 0.26 and 1.85 degree C for the PPG-containing Oligomucleotide and the corresponding PPG-containing MGB-modified oligomucleotide, respectively. The algorithm allows a collection of probe or primer sequences with a desired Tm value to be identified. The invention provides modified oligomucleotides for mismatch discrimination. It also provides methods for distinguishing related polynucleotides, detecting target sequences, sequencing, primer extension, for examining gene expression, and for identifying a mutation
                                                                                                                                                                                                                                                                                                                               New modified oligonucleotides containing pyrazolo-pyrimidine and/or 5-substituted pyrimidine bases, useful as probes or primers in assays, especially for mismatch discrimination.
                                                                                                     Afonina IA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 13; Page 87; 116pp; English.
                                                                                                Lokhov SG,
(EPOC-) EPOCH BIOSCIENECS INC
                                                                                           Gall AA, Lokhov
, Vermeulen NMJ;
                                                                                                                                                                                                                                         WPI; 2001-648247/74.
                                                                                           Dempcy RO, G
Kutyavin IV,
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Length 15; 4; Indels Sequence 15 BP; 3 A; 1 C; 0 G; 6 T; 0 U; 5 Other; 13.7%; Score 10; DB 1; I 71.4%; Pred. No. 1.1e+03; ative 0; Mismatches 4; 940 TICATIGGITIAAT 953 10; Conservative Query Match Best Local Similarity

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Gaps ..

> '217/c AAS57217 standard; DNA; 15 TTCATNNNTNTAAT 15 16-JAN-2002 (first entry) N AAS57217;

Human CHRNB2 allele specific oligonucleotide (ASO) probe #14.

CHRNB2; memory disorder; Alzheimer's disease; epilepsy; learning; chromosome 1q21; schizophrenia; attention deficit/hyperactivity disorder; ADHD; autosomal dominant nocturnal frontal lobe epilepsy; ADNFLE; ss; Human; cholinergic receptor, nicotinic, beta polypeptide 2; neuronal; allele specific oligonucleotide; ASO; probe.

Homo sapiens

WO200174833-A2.

11-OCT-2001

03-APR-2001; 2001WO-US010666

03-APR-2000; 2000US-0194155P. 13-JUL-2000; 2000US-0217952P.

(GENA-) GENAISSANCE

Sanchis A; Lee HH, Koshy B, Kliem SE, Choi JY,

WPI; 2001-626374/72

Genotyping cholinergic receptor, nicotinic, beta-polypeptide 2 gene of an individual involves determining for two copies of the gene, the identity of nucleotide pair at polymorphic sites selected from PSI-24.

Claim 15; Page 14; 82pp; English.

Singer MJ;

The invention relates to genotyping/haplotyping the cholinergic receptor, nicotinic, beta-polypeptide 2 (neuronal) (CHRNB2) gene of an individual, comprising determining for the two copies of the CHRNB2 gene present in the individual, the identity of the nucleotide pair at one or more comprising determining for the nucleotide pair at one or more polymorphic sites selected from FSL-24. Also include are oligonucleotides for performing the method and the nucleotide sequence of the polymorphic contribution or detecting novel CHRNB2.

Comportions and for determining if an individual has a haplotype or haplotype pairs defined in the specification and to validate CHRNB2 as a candidate agent for treating a specific condition or disease predicted to be associated with CHRNB2 activity (e.g. a memory disorder, Alzheimer's disease, epilepsy, a learning disorder, schizophrenia, attention condition produced to deficit/hyperactivity disorder, (ADHD) and autosomal dominant nocturnal frontial lobe epilepsy (ADNED), and in the design of clinical trials of candidate drugs for treating specific conditions or disease predicted to compounds targeting CHRNB2 activity. The method is useful to screen for compounds targeting CHRNB2 activity. The method is useful to screen for associated with CHRNB2 activity. The polymorphic nucleic acids are useful in studying the expression and function of CHRNB2, and in expressing crelated to CHRNB2 activity and are useful for therapeutic purposes. The CHRNB2 gene is located on chromosome lq21. The present sequence is an companion of the invancion the invention

Sequence 15 BP; 3 A; 0 C; 10 G; 1 T; 0 U; 1 Other;

Gaps ; 0 Score 10; DB 1; Length 15; Pred. No. 1.1e+03; 1; Indels 1; Mismatches 83.3%; 13.7%; Conservative Query Match Best Local Similarity Matches 10, Conserve

0;

931 ICCCICCICTIC 942 15 TCCCTCCYCTCC 4 ð g

AAF48236 standard; DNA; 15 (first entry) 30-MAR-2001 AAF48236; RESULT 869 AAF4823

GFBP3 oligonucleotide #1656.

BP.

Antisense therapy, antiproliferative; antiinflammatory; antipsoriatic; cytostatic, dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriaais; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scaleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; sa

Homo sapiens.

8-DEC-2000.

WO200078341-A1

21-JUN-2000; 2000WO-AU000693.

99US-0140345P. 21-JUN-1999;

(MURD-) MURDOCH CHILDRENS RES INST.

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                                                                                                                                                                                                                                                                                                      The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide sof the present invention (see ARF45151 and ARF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pliaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keardosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis; kidney disease; neoblasis condition; hyperplasis; kidney disease;
                                                                                                          Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 0 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
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  Edmondson SR
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                                                                                                                                                                                                                                                          Example 7; Page 54; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vessels or any other hyperplasia
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Best Local Similarity 100.
Matches 10; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         932 CCCTCCTCTT 941
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                                                        WPI; 2001-041421/05
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     Wraight CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an coligonuclectide which can be used to design the antisense of inflammation and/or other disorders. The present sequence is an coligonuclectide of the present invention (see AAF45151 and AAF45153-CC P45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, piltriasis, valax, pilaris, serborrhoea, keloids, keratosis, coloplasias, scleroderma, warts, benign growths, cancers of the skin, a hypernovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood customers.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplama; kidney disease; neobascular condition; hyperplama; kidney disease;
Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 3 A; 5 C; 2 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                             Example 7; Page 55; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAF48461 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-0140345P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-JUN-2000; 2000WO-AU000693
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           934 CTCCTCTTCA 943
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                                                                                  inflammation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-DEC-2000.
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Example 7; Page 56; 201pp; English
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The present invention relates to a method for ameliorating the effects of neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGFB]-1 receptor, IGF binding protein [IGFBD]-2 or IGFBD3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichhyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, vessels or any other hyperplasia

Sequence 15 BP; 6 A; 2 C; 3 G; 4 T; 0 U; 0 Other;

13.7%; Score 10; DB 1; Length 15; 100.0%; Pred. No. 1.1e+03; 0; Mismatches Query Match
Best Local Similarity 100. 919 CTTTGCCTTT 928 CTTTGCCTTT 2 11

0

Gaps .,

0; Indels

RESULT 872 AAF49427

AAF49427 standard; DNA; 15 IGF-I oligonucleotide #387. 30-MAR-2001 (first entry) AAF49427;

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF1:, pitryiasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; soleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000

21-JUN-2000; 2000WO-AU000693.

99US-0140345P

21-JUN-1999;

(MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Werther GA, Wraight CJ,

WPI; 2001-041421/05

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 63; 201pp; English.

The present invention relates to a method for ameliorating the effects of

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGP]-1 receptor, IGF binding protein [IGRBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation,

Example 8; Page 63; 201pp; English.

inflammation.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

WPI; 2001-041421/05

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skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor. IGF binding protein [IGFBP]-2 or IGFBP], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides which can be useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, ichthyosis, pityriasis, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGFP-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia, kidney disease; neobascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                       13.7%; Score 10; DB 1; Length 15; 100.0%; Pred. No. 1.1e+03;
                                                                                                                                                                                                                                                                                                                                        0; Indels
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                                                                                                                                                                                                                                                                                                                                          0; Mismatches
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                                                                                                                                                                                                                                     vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF49428 standard; DNA; 15 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IGF-I oligonucleotide #388.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                          10; Conservative
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                                                                                                                                                                                                                                                                                                                         Local Similarity
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inflammation and/or other disorders. The present sequence is an objegouscleotide which can be used to design the antisense oligonucleotides which can be used to design the ARF45151 and ARF45153-P45161). The method is useful for ameliorating the effects of psoriasis, inchtyvoisis, ruba, pilaris, serbornhea, kelolids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperpoliferation of the inside of blood vessels or any other hyperplasia
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Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

·. Gaps ; Length 15; 0; Indels DB 1; Le 0; Mismatches Score 10; Pred. No. 13.7%; Query Match Best Local Similarity 100. Matches 10; Conservative

908 14 899 CCCTGGTCAT CCCTGGTCAT

SULT 874 F48462/C

AAF48462 standard; DNA; 15

ВЪ.

AAF48462;

(first entry) 30-MAR-2001

IGFBP3 oligonucleotide #1882.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasia; kidney disease; neoblasia; schooling; ss.

Homo sapiens.

WO200078341-A1

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

99US-0140345P 21-JUN-1999; (MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR Werther GA, Wraight CJ,

WPI; 2001-041421/05

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 56; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis,

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The invention relates to single nucleotide polymorphisms in the gene encoding human small inducible cytokine A2 (SCYA2) polypeptide. A method for haplotyping the SCYA2 gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the SCYA2 haplotypes given in the specification or whether both copies are defined by a haplotype pair. This method is useful in genotyping, whereby all possible haplotype pair. This method is useful in genotyping, whereby all possible haplotype or haplotype pair of the SCYA2 gene can be assigned to specific genotypes. An association between a trait and a haplotype or haplotype pair of the haplotype or haplotype pair in a population exhibiting the trait with the frequency of the haplotype pair in a reference population, where a higher haplotype or haplotype or haplotype or haplotype or haplotype pair. SCYA2 and its corresponding DNA are used frequency in the trait population indicates the trait is associated with the haplotype or haplotype pair. SCYA2 and its corresponding DNA are used for studying the expression and function of SCYA2, and in screening for candidate drugs to treat diseases related to SCYA2, and in screening for atherosclerosis. Sequences ABK686891-ABK68692 represent allele-specific
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New genetic variants having polymorphisms in the small inducible cytokine Al (SCYA2 ) gene, useful for studying the function of SCYA2 , and for treating disorders affected by expression or function of the SCYA2
ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human, small inducible cytokine A2; SCYA2; primer; ss, haplotype pair; haplotyping, atherosclerosis; antiarteriosclerotic; gene therapy; single nucleotide polymorphism; genotyping; drug screening; sequencing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human SCYA2 gene allele-specific oligonucleotide sequencing primer #1.
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                                                                                                                                                                                                 Length 15;
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                                                                                                                                                     Sequence 15 BP; 7 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                 13.7%; Score 10; DB 1; Le 100.0%; Pred. No. 1.1e+03; ttive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Koshy B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 17; Page 13; 58pp; English.
                                                                                                               vessels or any other hyperplasia
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                                                                                                                                                                                                                   Local Similarity 100.
Les 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     chromosome 17q11.2-q21.1.
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                                                                                                                                                                                                                                                                                                                                10 CTTTGCCTTT 1
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                                                                                                                                                                                                                                                                                                                               Human; glutathione reductase; GDK; enzyme; macmozzzzzgene therapy; antianaemic; polymorphic; single nucleotide polymorphism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New genetic variants of Glutathione reductase isogenes, useful for improving efficiency and reliability in drug development for treating
                                                                                                 Gaps
oligonucleotide sequencing primers used for detecting SCYA2 gene
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                                                                                                                                                                                                                                                                                                    Human GSR allele specific oligonucleotide probe SEQ ID NO:24.
                                                                 13.7%; Score 10; DB 1; Length 15; 100.0%; Pred. No. 1.1e+03; ive 0; Mismatches 0; Indels
                                         Sequence 15 BP; 2 A; 7 C; 2 G; 3 T; 0 U; 1 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag= a
/note= "polymorphic base"
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                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
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                                                                                                                                                                                                                    ABN87905 standard; DNA; 15 BP.
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                                                   Query Match
Best Local Similarity 100...
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                                                                                                                        930 ATCCCTCCTC 939
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              polymorphisms
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망망됐었
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candidate target for treating a specific condition or disease predicted to be associated with GSR activity, e.g. haemolytic anaemia, and in the design of clinical trials for treating a specific condition of disease associated with GSR activity; and for screening compounds targeting GSR. (I) is useful in studying the expression and function of GSR, and in expressing GSR protein for use in screening for candidate drugs to treat diseases related to GSR activity. (I) is also useful in studying the effect of the variation on the biological activity of GSR as well as on the binding affinity of candidate drugs targeting GSR for the treatment of haemolytic anaemia. The present sequence represents an allele specific

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The invertion trainers to single fluctectide polymorphisms in the gene encoding the human G protein-coupled receptor similar to the adrenomedullin receptor (ADMR) polypeptide. A method for haplotyping the ADMR gene in an individual comprises identifying the nuclectide at one or more polymorphic sites and determining whether one of the copies of the copies of the ADMR haplotypes given in the specification or whether both copies are defined by a haplotype pair. This method is useful in genotyping, whereby all possible haplotype pairs can be assigned to specific genotypes. An association between a trait and a haplotype or haplotype pair of the ADMR gene can be identified by comparing the frequency of the haplotype or haplotype pair in a reference population, where a higher haplotype or haplotype pair in a reference population, where a higher haplotype or haplotype pair. ADMR and its corresponding DNA are used for studying the expression and function of ADMR, for use in screening the radidate drugs to treat diseases related to ADMR activity, such as congestive heart failure, arterial hypertension, pulmonary hypertension, remal failure, and sepsies. Sequences ABKB1282-ABKB1303 represent allelesspecific oligonucleotide sequencing primers used to detect ADMR gene
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oligonuclectide (ASO) probe for the human GSR gene, which is given in the exemplification of the present invention. N.B. The polymorphic base (showing a single nucleotide polymorphism) in the ASO probe is shown using an IUPAC ambiguity code (as given in the present invention)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, G protein-coupled receptor similar to the adrenomedullin receptor, AbMR, haplotyping, haplotype pair; congestive heart failure; primer; ss; arterial hypertension; pulmonary hypertension; renal failure; sepsis; chromosome 12; single nucleotide polymorphism; sequencing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel G-protein coupled receptor similar to the adrenomedullin receptor gene, useful therapeutically and in screening for drugs targeting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human ADMR gene allele-specific oligonucleotide sequencing primer #22.
                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     invention relates to single nucleotide polymorphisms in the gene
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                                                                                                                                                    13.7%; Score 10; DB 1; Length 15; 83.3%; Pred. No. 1.1e+03; ive 1; Mismatches 1; Indels
                                                                                                           Sequence 15 BP; 7 A; 4 C; 1 G; 2 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 14; Page 14; 78pp; English
                                                                                                                                                                                                                                                                                                                                                                                         ABK81303 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-SEP-2000; 2000US-0236570P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-OCT-2001; 2001WO-US030879.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shah N;
                                                                                                                                                                                                                                         941 TCATTGGTTTAA 952
                                                                                                                                                                        l Similarity 83.3
10; Conservative
                                                                                                                                                                                                                                                                               12 rcarycerrrea 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      receptor polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-435192/46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Choi JY, Lee HH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200226770-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                   ABK81303;
                                                                                                                                                        Query Match
                                                                                                                                                                            Best Local
                                                                                                                                                                                                                                                                                                                                              RESULT 877
                                                                                                                                                                                              Matches
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                                                    Length 15;
                                                                           0; Indels
                                                 DB 1; Le 1.1e+03;
                        Seguence 15 BP; 4 A; 2 C; 7 G; 1 T; 0 U; 1 Other;
                                                                            0; Mismatches
                                                 13.7%; Score 10; 100.0%; Pred. No.
                                                                            Conservative
                                                                                                       942
                                                                                                                               10 cercerent 1
                                                                                                       933 CCTCCTCTTC
                                              Query Match
Best Local Similarity
Matches 10; Conserv
polymorphisms
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SULT 878

AAS16187 standard; DNA; 15 AAS16187;

BP.

(first entry) 14-FEB-2002 Human apolipoprotein C1 (APOC1) gene oligonucleotide probe #5.

haplotyping; haplotype pair; hypercholesterolaemia; nootropic; SDAT; ss; senile dementia of Alzheimer's type; neuroprotective; antilipaemic. Human; apolipoprotein C1; APOC1; single nucleotide polymorphism; probe;

Homo sapiens.

WO200177129-A2.

18-OCT-2001

10-APR-2001; 2001WO-US011808

11-APR-2000; 2000US-0196545P

(GENA-) GENAISSANCE PHARM INC.

Stephens JC; Koshy B, Choi JY, Chew A, Bentivegna SC,

WPI; 2002-041286/05.

New haplotypes of the human apolipoprotein Cl gene, useful to detect and find treatment for disease associated with its activity such as hypercholestrolemia and Alzheimer's disease.

Claim 16; Page 13; 51pp; English.

The invention relates to single nuclectide polymorphisms in the human apolipoprotein C1 (APOC1) gene. Haplotyping the APOC1 gene of an individual, comprises determining if the individual has one of the APOC1 haplotypes or haplotype pairs fully defined in the specification. Genotyping the APOC1 gene of an individual, comprises determining the identity of the nucleotide pair at one or more polymorphic sites and predicting a haplotype pair for the APOC1 gene of an individual by enumerating all possible haplotype pairs which are consistent with the genotype, comparing the possible haplotype pairs to the data detailed in the specification and assigning a haplotype pair to the individual bat is consistent with the data. Identifying an association between a trait and a haplotype of the haplotype/haplotype pair in a population exhibiting the trait with that of a reference population, where the haplotype pair is one described in the specification and a higher frequency in the trait population indicates the trait is associated with the haplotype. The sequences and methods of the invention are used to diagnose and develop treatment for disease associated with APOC1 activity, such as hypercholesterolaemia and senile dementia of archering human apoct, man ollownorthine archiage. probe used for detecting human APOC1 DNA polymorphisms

Seguence 15 BP; 7 A; 5 C; 0 G; 2 T; 0 U; 1 Other;

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The present invention describes a modified Cry protein (1) that is sensitive to pepsin and comprises at least one additional pepsin cleavage sensitive to pepsin and comprises at least one additional pepsin cleavage csite (PCS). Also described: (a) increasing pepsin sensitivity of Cry proteins by incorporating at least one extra PCS; (b) polyuucleotides (II) that encode (I); (c) chimeric genes (CG) that contain a promoter. (II) that encode (I); (d) expression or transformation vector (III) that contains CG; (e) host organism (IV) transformation vector (III) that contains (IV) and (9) mono- or polyclonal antibodies (Ab) directed against (I). (I) has insecticide activity. (I) can be used as insecticides, particularly where expressed in transgenic plants. (I) are sensitive to enzymes in the digestive tract of mammals, so do not persist of the tract (lack of persistence is required by regulatory authorities in the tract (lack of seeds containing Cry proteins). Extra PCS do not cincrease degradation in the digestive tract of insects, so have no effect on insecticidal activity. ABV33450 to ABV33909 and ABP67997 to ABP68308 containing cry proteins (PC) represent sequences used in the exemplification of the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New modified Cry protein, useful as insecticide, comprises at least one additional pepsin cleavage site to reduce persistence in mammalian gut.
                                                                                                                                                                                                                                                                                                                                                        Bacillus thuringiensis; insecticide; toxin; Cry; pepsin cleavage site;
                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                   Bacillus thuringiensis toxin Cry related oligonucleotide CrylGa.
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                                        ·;
Score 10; DB 1; Length 15;
Pred. No. 1.1e+03;
1; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 5 A; 0 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13.7%; Score 10; DB 1; Le
100.0%; Pred. No. 1.1e+03;
Live 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 4; Page 37; 134pp; French.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AVET ) AVENTIS CROPSCIENCE SA.
                                                                                                                                                                                                           BP.
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     13.7%;
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                                                                                                                                                                                                           ABV93654 standard; DNA; 15
                                                                                                                                                                                                                                                                                   (first entry)
Query Match
Best Local Similarity 83.3
Matches 10, Conservative
                                                                              907 ATTITCTITGGT 918
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13 ATTTTYATTGGT 2
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                                                                                                                                                                                                                                                                                                                                                                                                                  Bacillus thuringiensis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freyssinet G, Rang C,
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                                                                                                                                                                                                                                                                                                                                                                             pepsin; PCS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FR2822157-A1.
                                                                                                                                                                                                                                                                                   08-JAN-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                ABV93654;
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Matches
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schultz1-899.rng

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Target; human interleukin-1 receptor gene; AIDS; triplex; HIV; hepatitis;
malignancy; inflammation; ds.
                                                                                                                                                                                                                                                                                                                          New oligomers contg. modified bases - which form a triplex with G-C doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis, herpes malignancy and inflammation.
                                                                                                                                                                                                                                                                                        Matteucci MD, Milligan J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;
                                                                              Purine rich HUMILIRA target duplex sequence.
                                                                                                                                                                                                                                                                                                                                                               Claim 11; Page 64; 77pp; English.
                                                                                                                                                                                                        91US-00643382.
91US-00683420.
91US-00686544.
91US-00686547.
91US-00686547.
                 AAQ25497 standard; DNA; 13 BP
                                                                                                                                                                               91WO-US008B11.
                                                                                                                                                                                                 90US-00617907
                                                    (revised)
(first entry)
                                                                                                                                                                                                                                                                                        Krawczyk S,
                                                                                                                                                                                                                                                                      (GILE-) GILEAD SCI INC.
                                                                                                                                                                                                                                                                                                          WPI; 1992-217083/26.
                                                                                                                                                                                                                          17-APR-1991;
17-APR-1991;
17-APR-1991;
                                                                                                                                            WO9209705-A1
                                                                                                                                                                               25-NOV-1991;
                                                                                                                                                                                                         18-JAN-1991;
08-APR-1991;
                                                                                                                                                                                                                                                     27-SEP-1991;
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                                                   25-MAR-2003
07-DEC-1992
                                                                                                                                                             11-JUN-1992
                                                                                                                                                                                                                                                                                       Froehler B,
                                                                                                                          Synthetic.
                                  AAQ25497;
RESULT 880
AAQ25497/c
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RESULT 882
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The sequence depicts a HUMILIRA (interleukin-1 receptor) sequence contg. a purine-rich region concentrated on one chain of the duplex sequence contg. a purine-rich region concentrated on one chain of the duplex. The sequence may be prepd. by standard DNA synthesis. The HUMILIRA duplex. The sequence is used as a target for novel oligomers which are capable of forming a triplex at physiological pH by coupling into the major groove of the DNA duplex. Such an oligomers is ILIR 901 which is capable of forming a triplex with this sequence. The oligo- mers are used in the treatment of inflammation. Similar oligomers may be used to target viral DNA duplexes specific for HIV, herpes and other viruses. The triple believes form under mild conditions thus assays may be carried out without subjecting the test specimen to harsh conditions. The oligomer is able to inhibit gene expression, as verified by in vitro systems. See also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  926 TITTATCCTCCT 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rrcrcrcccrcr 1
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Best Local Similarity
Matches 11; Conserv
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Triplex formation; DNA detection; triple helix; identification; bacteria;

AAQ88665 standard; DNA; 13 BP.

RESULT 881 AAQ88665/c ID AAQ86 XX

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                                                                                                                                                                                      filing strategy, immobilised nucleic acid probe array; mitochondrial DNA;
D-loop region; biological chip; hybridisation fingerprint;
interrogation position; ss.
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Lipshutz RJ, Lobban PE, Miyada CG, Morris MS, Shah N, Sheldon EL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A DNA chip was prepared for analysing sequences contained in a 1.3kb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New arrays of oligo:nucleotide probes - used for comparing known sequences with variants for detection of mutation(s) and sequencing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      be correlated with differences in the cloned genomic DNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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                                                                                                                         Human mitochondrial D-loop region DNA probe 9-15.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 108; 223pp; English.
                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
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                                                            (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                      Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-OCT-1994;
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                                                            03-JAN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W09511995-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-AUG-1994;
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                                                                                                                                                                                                                                                                                                                      Synthetic
AAQ88665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
XXXXXXXXX
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Miyada CG;

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The present invention describes an array of nucleic acid probes

immobilised on a solid support, which comprises: (1) a first probe set,

comprising probes with a segment of at least 6 nucleotides complementary

to the CFTR (cystic fibrosis transmembrane conductance regulator) gene,

where the segment includes at least 1 interrogation position

complementary to a nucleotide in the CFTR gene sequence; and (2) second,

third and fourth probe sets, each comprising probes identical to those in

(1) except that the interrogation position is occupied by a different

conclectide. AAA05991 to AA40640 represent CFTR gene analysis

coligonucleotide probes for use in the exemplification of the present

cinvention. The present invention also describes a method of comparing a

target nucleic acid with a reference sequence consisting of a

consisting the target nucleotides, comprising: (a) hybridising a

complement of the analysis and second

probes immobilised on a solid support; (b) comparing the relative

complement of the interrogation position of the probe having the greater

complement of the interrogation position of the probe having the greater

complement of the interrogation position of the probe having the relative

specific binding of a further two corresponding probes from the first and

second probe sets until each nucleotide of interest in the target

second probe sets until each nucleotide of interest in the target

considered the corresponding probes from the first and

second probe sets until each nucleotide of sucressing the relative

second probe sets until each nucleotide of sucressing the relative

second probe sets until each nucleotide of sucressing the relative

second probe sets until each sucressing second propes from the first and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                            An array of nucleic acid probes immobilized on a solid support, useful for identifying mutations in the cystic fibrosis transmembrane conductance regulator.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide SEQ ID NO 93220 for detecting SNP TSC0023294.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 9.8; DB 1; Length 13;
Pred. No. 1.18+03;
0; Mismatches 2; Indels
                                                                                                                                                                                                    Chee M, Lobban PE, Hubbell EA, Sheldon EL,
Lipshutz RJ, Morris MS, Fodor SPA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 13 BP; 0 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Col 75; 114pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene, e.g. detection of mutations
                                                                                                                                                                                                            Chee M, Lobban PE,
                     93US-00143312.
94US-00284064.
94WO-US012305.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABC93203 standard; DNA; 13 BP.
                                                                                                  95US-00510521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 13.4%;
Best Local Similarity 84.6%;
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          915 TGGTCTTTGCCTT 927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                        (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                     WPI; 2000-194825/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200177384-A2
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                                                   02-AUG-1994;
26-OCT-1994;
                                                                                                       02-AUG-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-OCT-2001.
                                                                                                                                                                                                         Huang XC,
Cronin MT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABC93203;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence represents a polynucleotide that is able to form a triple helix with a double stranded sequence. Cytosine bases in the present can be replaced with 5-methylcytosine for increased triplex stability. The present sequence is used in the assay of the invention, where it can be part of the anchor DNA or reporter DNA sequence. The assay comprises adding a sample containing double-stranded DNA test sequences to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (by detecting genes for ribosomal RNA) in clinical samples, but also detection of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CFTR; cystic fibrosis transmembrane conductance regulator; detection; mutation; probe; human; hybridisation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       / Match 13.4%; Score 9.8; DB 1; Length 13; Local Similarity 84.6%; Pred. No. 1.1e+03; nes 11; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CFTR gene analysis oligonucleotide probe SEQ ID NO:29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 13 BP; 0 A; 8 C; 0 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Col 15-16; 168pp; English.
                                                                                                                                                                                                                                                                                                                                         (PROF-) PROFILE DIAGNOSTIC SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     oncogenes and Hepatitis B virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
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                                                                                                                                                                                                                                       93US-00173489
                                                                                                                                                                                                                                                                                           92US-00968436.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA06019 standard; DNA; 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-130384/11.
     SS
oncogene; virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
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                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                           29-OCT-1992;
                                                                                                                                                                                                                                       22-DEC-1993;
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                                                                                                                                US5861244-A.
                                                                                                                                                                                   19-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                             Hepburn AG,
                                                   Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              bacteria.
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Best Loca Matches

SULT 883

0

Gaps

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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                            ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Berlin K;
       06-APR-2001; 2001WO-IB000713.
                     07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                      928 TTATCCCTCCTCT 940
                                                                                                                                                                                                                                                                                                                         ABC93919 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                       21-FEB-2002 (first entry)
                                                                                                                                                                                                                                         Query Match 13.4 Best Local Similarity 84.6 Matches 11; Conservative
                                                                                                                                                                                                                                                                                    říAřĆČČGČČCČŤ 13
                                                  Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (EPIG-) EPIGENOMICS AG
                                                                WPI; 2001-657177/75.
                                   (EPIG-) EPIGENOMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-657177/75
                                                                                               methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
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                                                 olek A,
                                                                                                                                                                                                                                                                                                                                        ABC93919;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        olek A,
                                                                                                                                                                                                                                                                                                           RESULT 885
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABR0010-ABE9989, ABR0010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE03989, ABE00010-ABE9989, ABE00010-ABE9989, ABE00010-ABE9989 and ABE00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, i
designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide SEQ ID NO 19434 for detecting SNP TSC0004044.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
                                                  Claim 1; SEQ ID NO 93936; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 19434; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Seguence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABC19417 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-APR-2001; 2001WO-IB000713.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            84.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-657177/75.
nethylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 886
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                         acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABH9989 and ABI00010-ABH82073 tepresent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                              Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide SEQ ID NO 93936 for detecting SNP TSC0023471.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; rative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 93220; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 13 BP; 1 A; 7 C; 1 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                              Berlin K;
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ABC99316 standard; DNA; 13

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                           Query Match 13.4%; Score 9.8; DB 1; Length 13; Best Local Similarity 84.6%; Pred. No. 1.1e+03; Matches 11; Conservative 0; Mismatches 2; Indels
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                                                                                                                                                      Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
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Best Local Similarity
Matches 11; Conserv
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC90989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                  Oligonucleotide SEQ ID NO 99333 for detecting SNP TSC0024681,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; vative 0; Mismatches 2; Indels
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This invention describes novel oligonuclectide primers or peptide nucleic
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                                                                                              nethylation status.
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peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 100944; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03;
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                                   Homo sapiens
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH9989, ABH00010-ABH9989 and ABI0010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPD at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 27676; 29pp + Sequence Listing; German.
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ftp.wipo.int/pub/published_pct_sequences
Berlin K;
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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and range of diseases including immune system, gastrointestinal, respiratory central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC09989, ABF00010-ABF9988, ABM0010-ABH9989 and ABI00100-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this partent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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[1 Similarity 84.6%;
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Best Local Similarity
Matches 11; Conserv
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide SEQ ID NO 33290 for detecting SNP TSC0010604. BP. 06-APR-2001; 2001WO-IB000713 07-APR-2000; 2000DE-01019173 ABC33273 standard; DNA; 13 (first entry) WO200177384-A2 Homo sapiens. 20-FEB-2002 18-0CT-2001 ABC33273; SULT 892 3C33273/c

ĸ, Olek A, Piepenbrock C, (EPIG-) EPIGENOMICS

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 33290; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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13.4%;
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Matches 11; Conservative
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acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99999, ABR0010-ABE99999 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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ftp.wipo.int/pub/published_pct_sequences
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                                                              06-APR-2001; 2001WO-IB000713.
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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 197334; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABB9989 and ABI00010-ABB9989 and ABI00010-ABB9989 and ABI00010-ABB9989 and ABI00010-ABB9989 and ABI00010-ABB9989 and ABI00010-ABB9989 and control of the prime for the primed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13; Best Local Similarity 84.6%; Pred. No. 1.1e+03; Matches 1; Indels 0; Gaps

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LT 897

H23622 H23622 H23622 Standard; DNA; 13

BP.

ABH23622;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 223599 for detecting SNP TSC0054425.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonuclectides, useful for diagnosis and cell typing, is designed to detect single-nuclectide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 223599; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastroinestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

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oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at from the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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Matches 11; Conservative
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Oligonucleotide SEQ ID NO 156001 for detecting SNP TSC0039366.
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                                                                    Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but fire wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                Oligonucleotide SEQ ID NO 225656 for detecting SNP TSC0055005.
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                                                                              ABH25679 standard; DNA; 13 BP
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911 TCTTTGGTCTTTG 923
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13 TTTTGGTGTTG 1
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               was obtained in electronic format from W:
ftp.wipo.int/pub/published_pct_sequences
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Claim 1; SEQ ID NO 161757; 29pp + Sequence Listing; German.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PMA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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to detect single-nucleotide polymorphisms and cytosine
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07-APR-2000; 2000DE-01019173
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Gaps ., 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels Sequence 13 BP; 1 A; 7 C; 0 G; 5 T; 0 U; 0 Other; llarity 84.6%; Conservative Local Similarity es 11; Conserv Query Match Matches

ABF61760 standard; DNA; 13 ABF61760; SULT 902

BP.

22-FEB-2002

(first entry)

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Oligonucleotide SEQ ID NO 161757 for detecting SNP TSC0040719.

Homo sapiens

WO200177384-A2

18-OCT-2001,

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

Berlin Piepenbrock C, olek A,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

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                              This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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ABH12091 standard; DNA; 13 BP.
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84.6%;
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ABH45585 standard; DNA; 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genemic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. AGC00010-ABC9989, ABC0010-ABH99989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                     Length 13;
                                                 ch 13.4%; Score 9.8; DB 1; Length 13 l Similarity 84.6%; Pred. No. 1.1e+03; 11; Conservative 0; Mismatches 2; Indels
                        Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
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Matches 11; Conservative
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Best Local Similarity
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE99999, ABF00010-ABE99999, ABF00010-ABE99999, ABF00010-ABE99999 and ABI00010-ABE3073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                         Oligonucleotide SEQ ID NO 245562 for detecting SNP TSC0059959.
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Homo sapiens.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABE99989 and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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ABH56041 standard; DNA; 13
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Homo sapiens.

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oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99889, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                               was obtained in electronic format from W. ftp.wipo.int/pub/published_pct_sequences
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Pred. No. 1.1e+03;
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21-FEB-2002

WO200177384-A2.

18-OCT-2001.

Homo sapiens.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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nes 11; Conservative
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18-OCT-2001
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                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                    Oligonucleotide SEQ ID NO 52740 for detecting SNP TSC0014605.
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Best Local Similarity
Matches 11; Conservat
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Gaps

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Set of oligonucleotides, useful for diagnosis and cell typing, is

WO200177384-A2

Homo sapiens

20-FEB-2002

ABC07406;

SULT 912 C07406/c

ftp.wipo.int/pub/published_pct_sequences Claim 1;

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acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABC99999, ABH00010-ABC99999 ABH00010-ABC99999 and ABI00010-ABC99999 and ABI00010-ABC99999 and ABI00010-ABC99999 and ABI00010-ABC99999 and contact the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                       methylation status
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Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
Sequence 13 BP; 3 A; 5 C; 2 G; 3 T; 0 U; 0 Other;
                                  13.4%;
84.6%;
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                      Query Match 15.3.
Best Local Similarity 84.67
Matches 11; Conservative
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Gaps

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ABC84498 standard; DNA; 13
       (first entry)
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    ABC84498
ABC84498/
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Oligonucleotide SEQ ID NO 84515 for detecting SNP TSC0021261.

central nervous system; gastrointestinal; respiratory; immune; metabolic. SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

Homo sapiens

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin Olek A, Piepenbrock C,

WPI; 2001-657177/75.

ligonucleotides, useful for diagnosis and cell typing, : to detect single-nucleotide polymorphisms and cytosine useful for diagnosis Set of oligonucleotides, methylation status designed

Claim 1; SEQ ID NO 84515; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073

928 TTAICCCICCICT 940

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represent the oligomers described in the invention. NOTE: The sequence data for this parent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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84.6%; Pred. No. 1.18+03;
cive 0; Mismatches 2; Indels
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Best Local Similarity 84.6
Matches 11; Conservative
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                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                ABF12123 standard; DNA; 13
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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Best Local Similarity 84.6'
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Berlin K;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained, in electronic format from WIPO at
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                                                                                                    bet or oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                Claim 1; SEQ ID NO 140333; 29pp + Sequence Listing; German.
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BP

Claim 1; SEQ ID NO 193483; 29pp + Sequence Listing; German.

Berlin

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
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Gaps

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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels

BP.

Query Match

Matches

ABF96258;

SULT 921 F96258/c

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99999, ABH00010-ABH99999 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                              Oligonucleotide SEQ ID NO 197567 for detecting SNP TSC0048621
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ABF97570 standard; DNA; 13
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                                    13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels
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5 C; 0 G; 5 T; 0 U; 0 Other;
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Best Local Similarity 84.6%;
Matches 11; Conservative
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les 11; Conservative
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  Sequence 13
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SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

Oligonucleotide SEQ ID NO 148953 for detecting SNP TSC0037589.

926 TITIAICCCICCT 938

13 TTTTTCCCCCT 1

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                  of oligonucleotides, useful for diagnosis and cell typing, igned to detect single-nucleotide polymorphisms and cytosine
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                        Claim 1; SEQ ID NO 148954; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                          13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels
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central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABF0010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fig. wipo.int/pub/published_pct_sequences
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Query Match 13.4%; Score 9.8; DB 1; Length 13; Best Local Similarity 84.6%; Pred. No. 1.1e+03; Matches 11; Conservative 0; Mismatches 2; Indels

Sequence 13 BP; 7 A; 0 C; 4 G; 2 T; 0 U; 0 Other;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretracted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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              Oligonucleotide SEQ ID NO 187618 for detecting SNP TSC0007370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 187618; 29pp + Sequence Listing; German.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but two.int/pub/published_pct_sequences
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Claim 1; SEQ ID NO 264162; 29pp + Sequence Listing; German.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99889, ABC0010-ABB9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but two bobtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;

Gaps .. Score 9.8; DB 1; Length 13; Pred. No. 1.18+03; 0; Mismatches 2; Indels 13.4%; 84.6%; 11; Conservative Query Match Best Local Similarity Matches

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SULT 931

BP. C96141/c ABC96141 standard; DNA; 13

ABC96141;

(first entry) 21-FEB-2002 Oligonucleotide SEQ ID NO 96158 for detecting SNP TSC0023904.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

ĸ Piepenbrock C, olek A,

WPI; 2001-657177/75

set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 96158; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNN. The oligonucleotides are used for diagnosis and/or prognosis of cancer and range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABE00010-ABE9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

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13.4%; 84.6%;

Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03;

Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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was obtained in electronic format from W. ftp.wipo.int/pub/published_pct_sequences
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central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                      Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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to detect single-nucleotide polymorphisms and cytosine
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                                                                                                    Oligonucleotide SEQ ID NO 100943 for detecting SNP TSC0025123.
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                               ABF00946 standard; DNA; 13 BP
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                                                                                                                                                                                                                                                                                                                                                                                             methylation status.
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       RESULT 933
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06-APR-2001; 2001WO-IB000713.
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Berlin K;
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Piepenbrock
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This invention describes novel oligonucleotide primers or peptide nuclei acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

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and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire printed specification, but fip.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formmat from WIPO at
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Pred. No. 1.1e+03;
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

WO200177384-A2

18-OCT-2001.

Homo sapiens.

Oligonucleotide SEQ ID NO 135068 for detecting SNP TSC0033671.

21-FEB-2002 (first entry)

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ABF35071;

Page 437

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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE099999. ABF00010-ABE99999 ABF00010-ABE99999 ABF00010-ABE99999 ABF00010-ABE99999 ABF00010-ABE99999 and ABI00010-ABE99999 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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   Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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84.6%;
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Best Local Similarity
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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ative 0; Mismatches 2; Indels

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Conservative

11;

Best Loc Matches

Query Match Best Local Similarity

ABF35071 standard; DNA; 13 BP

RESULT 939

ABF35071

18-0CT-2001

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99999, ABF00010-ABF99999, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire wipo.int/pub/published_pct_sequences
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of oligonucleotides, useful for diagnosis and cell typing, is igned to detect single-nucleotide polymorphisms and cytosine
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                                                                                                 Claim 1; SEQ ID NO 139993; 29pp + Sequence Listing; German.
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Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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Best Local Similarity 84.6%;
Matches 11; Conservative
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Berlin K;

Olek A, Piepenbrock C,

Homo sapiens.

18-OCT-2001.

21-FEB-2002

ABF39996;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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84.6%;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 tepresent the oligomers described in the invention. NOTE: The sequence data for this patent din out form part of the printed specification, but
                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                   Oligonucleotide SEQ ID NO 182698 for detecting SNP TSC0045151.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABR00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                        Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 243359; 29pp + Sequence Listing; German.
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07-APR-2000; 2000DE-01019173.
                                                      (EPIG-) EPIGENOMICS AG
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                                                                                                                                                                                                                                                                               methylation status.
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                                                         central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                         Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
Seguence 13 BP; 3 A; 1 C; 2 G; 7 T; 0 U; 0 Other;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a reange of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                              13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels
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Berlin K;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC09989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but typo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                    Oligonucleotide SEQ ID NO 250302 for detecting SNP TSC0061116.
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                    ABH50325 standard; DNA; 13
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                                                                                                                                                                                                                                                   Oligonucleotide SEQ ID NO 44370 for detecting SNP TSC0013028.
                        13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; trive 0; Mismatches 2; Indels
Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 U; 0 Other;
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                                                                              TCCCTCCTCTTCA 943
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Query Match Best Local S: Matches 11

ABH61551

SULT 951

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WPI; 2001-657177/75.
     methylation status.
                                   RESULT 953
                           Matches
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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
WPI; 2001-657177/75
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Claim 1; SEQ ID NO 44370; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABF00010-ABF99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;

Gaps . 0 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels Local Similarity 84.6 es 11; Conservative Query Match

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ABC20571 standard; DNA; 13 BP 20-FEB-2002 ABC20571

(first entry)

Oligonucleotide SEQ ID NO 20588 for detecting SNP TSC0004194.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABR0010-ABR9989, ABR0010-ABR9989, and ABI0010-ABR182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03;

13.4%; 84.6%;

Query Match Best Local Similarity

Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;

was obtained in electronic format from W. ftp.wipo.int/pub/published pct_sequences

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

Claim 1; SEQ ID NO 70877; 29pp + Sequence Listing; German.

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine

methylation status.

Claim 1; SEQ ID NO 20588; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a

ó range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Gaps 0 Oligonucleotide SEQ ID NO 70877 for detecting SNP TSC0018401. Score 9.8; DB 1; Length 13; Pred. No. 1.18+03; 0; Mismatches 2; Indels Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other; 0; Mismatches ftp.wipo.int/pub/published pct sequences Berlin K; BP. 06-APR-2001; 2001WO-IB000713. 13.4%; 07-APR-2000; 2000DE-01019173 ABC70860 standard; DNA; 13 940 TICATIGGITIAA 952 11; Conservative 13 rrgarrgerrra 1 Piepenbrock C, (EPIG-) EPIGENOMICS AG WPI; 2001-657177/75 Local Similarity WO200177384-A2 Homo sapiens 21-FEB-2002 18-OCT-2001 ABC70860; Query Match olek A, RESULT 954 Matches 8888888888888 qq 8

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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for disagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE099999, ABF00010-ABE99999, ABH0010-ABE99999 and ABI0010-ABE99999, represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
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                                          Oligonucleotide SEQ ID NO 25077 for detecting SNP TSC0006091.
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20-FEB-2002 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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ABC25060 standard; DNA; 13
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ABC25060;

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Length 13;

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06-APR-2001; 2001WO-IB000713.
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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine

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                                                                                      acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABC0010-ABC99989, ABC0010-ABC99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPD at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE09989, ABE00010-ABE99989, ABE00010-ABE99989, ABE00010-ABE99989 and ABI00010-ABE90010.
                                                                         This invention describes novel oligonucleotide primers or peptide nucleic
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                                                                                                                                                                                                                                                                                                                                                                     Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
                                  Claim 1; SEQ ID NO 75679; 29pp + Sequence Listing; German.
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84.6%;
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Best Local Similarity
methylation status.
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BP.

ABF12122 standard; DNA; 13

RESULT 961

ABF12122 ID ABF1

ABF12122;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                Length 13;
                                                                                                                                                                                                                                                                                2; Indels
                                                                                                                                        Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;
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                                                                                                                                                                                                        Score 9.8; DB 1;
Pred. No. 1.1e+03;
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Best Local Similarity 84.6%;
Matches 11; Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989, and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formmat from WIPO at fire printed specification, but fip.wipo.int/pub/published_pct_sequences
                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                      Oligonucleotide SEQ ID NO 112119 for detecting SNP TSC0027988.
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13.4%;

Local Similarity 84.6

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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomers for detecting single nucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory. Central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE039899. ABF00010-ABE93989. ABH0010-ABE93989 and ABI00010-ABI82073 at represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequence
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                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, i
designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 91417; 29pp + Sequence Listing; German.
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                                              Berlin K;
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                                              Piepenbrock C,
(EPIG-) EPIGENOMICS AG.
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                                                                                                                                                                                        methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 114855; 29pp + Sequence Listing; German.
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Pred. No. 1.1e+03;
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84.6%;
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Best Local Similarity
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                                                                      Homo sapiens.
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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABF00010-ABF99989, and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Ouery Match
13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps

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SULT 965

ABF29010 standard; DNA; 13

BP.

ABF29010;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 129007 for detecting SNP TSC0032298.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

Olek A, Piepenbrock C,

Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 129007; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
                               2; Indels
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                               0; Mismatches
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84.6%;
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84.68;
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                                                               941 TCATTGGTTTAAT 953
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les 11; Conservative
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Query Match
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ABF39539/c
ID ABF395
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ABF31354/c
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RESULT 969
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                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                   Oligonucleotide SEQ ID NO 139536 for detecting SNP TSC0034938.
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Homo sapiens

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC09989, ABF00010-ABE9989, ABF00010-ABE9989, ABF00010-ABE9989, ABF00010-ABE9989, and ABE00010-ABE9073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 144203; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels
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Set of oligonuclectides, useful for diagnosis and cell typing, is designed to detect single-nuclectide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 197333; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010, ABC99989, ABF00010-ABF99989, and in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;

Gaps ö / Match 13.4%; Score 9.8; DB 1; Length 13; Local Similarity 84.6%; Pred. No. 1.1e+03; Loss 11; Conservative 0; Mismatches 2; Indels Query Match Best Local 8 Matches

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SULT 970

ABF98050 standard; DNA; 13

BP.

ABF98050

(first entry) 22-FEB-2002

Oligonucleotide SEQ ID NO 198047 for detecting SNP ISC0048746.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

× Berlin Piepenbrock C, olek A,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 198047; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

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oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                     Score 9.8; DB 1; Length 13; Pred. No. 1.18+03; 0; Mismatches 2; Indels
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                                                                                                                                   Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;
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                                                                 Homo sapiens.
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                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                            Oligonucleotide SEQ ID NO 223600 for detecting SNP TSC0054425.
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                                                                           ABH23623 standard; DNA; 13 BP.
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Matches 11; Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 228563 for detecting SNP TSC0009481.
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Pred. No. 1.18+03;
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84.6%;
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es 11; Conservative
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Claim 1; SEQ ID NO 232551; 29pp + Sequence Listing; German.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                       Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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07-APR-2000; 2000DE-01019173
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                                                                                   (EPIG-) EPIGENOMICS
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Gaps ; 0 ch 13.4%; Score 9.8; DB 1; Length 13; I Similarity 84.6%; Pred. No. 1.1e+03; 11; Conservative 0; Mismatches 2; Indels Sequence 13 BP; 2 A; 4 C; 0 G; 7 T; 0 U; 0 Other; Query Match Best Local Similarity Matches 11; Conserv

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SULT 975 H32574/c

ABH32574 standard, DNA; 13

BP.

ABH32574;

(first entry) 22-FEB-2002

Oligonucleotide SEQ ID NO 232551 for detecting SNP TSC0056713.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

Berlin Piepenbrock C, olek A,

WPI; 2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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ABH35195 standard; DNA; 13
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ftp.wipo.int/pub/published_pct_sequences
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
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                                                               Oligonucleotide SEQ ID NO 235172 for detecting SNP TSC0057429
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Homo sapiens.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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GGTTATTTTTT 13
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WO200177384-A2 Homo sapiens.

18-OCT-2001

22-FEB-2002

ABH35273;

SULT 980 H35273,

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84.6%;

Best Local Similarity

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oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99899, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99899, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; ide nucleic acid; cytosine methylation; cardiovascular; primer; ss; ral nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                            13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03;
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13.4%; Score 9.8; DB 1; Length 13;

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WO200177384-A2

18-OCT-2001,

Homo sapiens.

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABR0010-ABE9989, ABH0010-ABE9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 261527; 29pp + Sequence Listing; German.
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                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                   ID NO 249465 for detecting SNP ISC0060939.
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WO200177384-A2.

Homo sapiens.

22-FEB-2002

ABH61550;

SULT 985 H61550/

Query Match

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Gaps

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Oligonucleotide SEQ ID NO 1422 for detecting SNP TSC0000501. RESULT 987 ABC01431, ð

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF99889 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form mart of the printed specification, but the wipo.int/pub/published_pct_sequences
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                          Claim 1; SEQ ID NO 18728; 29pp + Sequence Listing; German.
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Best Local Similarity 84.6
Matches 11; Conservative
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BP. ABC01431 standard; DNA; 13 (first entry) 20-FEB-2002 ABC01431;

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75

onucleotides, useful for diagnosis and cell typing, is detect single-nucleotide polymorphisms and cytosine Set of oligonucleotides, methylation status. 9 designed

Claim 1; SEQ ID NO 1422; 29pp + Sequence Listing; German.

acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 This invention describes novel oligonucleotide primers or peptide nucleic

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represent the oligomers described in the invention. NOTE: The sequence data for this parent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                            13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels
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                                                                                           Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
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WO200177384-A2 Homo sapiens.

18-OCT-2001

20-FEB-2002

ABC02476;

07-APR-2000;

Mon Oct 18 14:40:13 2004

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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84.6%;
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Best Local Similarity 84.6
Matches 11, Conservative
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                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
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Best Local Similarity 84.6
Matches 11, Conservative
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Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
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Matches 11, Conservative
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     (EPIG-) EPIGENOMICS AG.
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                    olek A,
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Matches 11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 85830; 29pp + Sequence Listing; German.
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                                                                                    Berlin K;
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                                              13.4%; Score 9.8; DB 1; Length 13;
larity 84.6%; Pred. No. 1.1e+03;
Conservative 0; Mismatches 2; Indels
5 C; 0 G; 1 T; 0 U; 0 Other;
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BP; 7
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Sequence 13
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010, ABC99889, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Best Local Similarity 84.6%;
Matches 11; Conservative

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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for disquess and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE09989, ABF00010-ABE9989, ABH0010-ABH99989 and ABI00010-ABE82073 tepresent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequence
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                                                                                                                              SNP, single nucleotide polymorphism, human, diagnosis, PNA, cancer; CNS, peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                Oligonucleotide SEQ ID NO 135611 for detecting SNP TSC0033846.
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Pred. No. 1.18+03;
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84.6%;
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ABF35614 standard; DNA; 13
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ABF95598 standard; DNA; 13
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                                                                                                                                                                                                                                        This invention describes novel oligonucleotide primers or peptide nucleic
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Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 221437; 29pp + Sequence Listing; German.
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central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Sequence 13 BP; 0 A; 0 C; 4 G; 9 T; 0 U; 0 Other;

Gaps 0; Length 13; 2; Indels Score 9.8; DB 1; Pred. No. 1.1e+03; 0; Mismatches Query Match 13.4%; Best Local Similarity 84.6%; Matches 11; Conservative

911 rcrrrggrcrrrg 923 TTTTTGGTGTTTG 13

SULT 999

ABF51815 standard; DNA; 13

BP.

ABF51815;

(first entry) 21-FEB-2002 Oligonucleotide SEQ ID NO 151812 for detecting SNP TSC0038352.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

olek A,

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WPI; 2001-657177/75.

set or oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 151812; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligoners for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligoners are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligoners described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

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0;
                               Gaps
                               ;
13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03;
                            2; Indels
                              0; Mismatches
               Best Local Similarity 84.6
Matches 11; Conservative
   Query Match
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940 TICATIGGITIAA 952
                  13 TTTATTGGATTAA 1
à
               g
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ВР ABF52196 standard, DNA; 13

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ABF52196;

Oligonucleotide SEQ ID NO 152193 for detecting SNP TSC0038456. (first entry) 21-FEB-2002

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

Berlin K; Piepenbrock C, olek A,

WPI; 2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 152193; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PMA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, confront nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 10 A; 0 C; 2 G; 1 T; 0 U; 0 Other;

., Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03; Indels 0; Mismatches 13.4%; 84.6%; Conservative Local Similarity Les 11; Conser Query Match Matches

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Gaps

ð ద RESULT 1001 ABF77449

ABF77449 standard; DNA; 13 BP.

ABF77449;

22-FEB-2002 (first entry)

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                                                                      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
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                 Oligonucleotide SEQ ID NO 177446 for detecting SNP TSC0010778.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 177446; 29pp + Sequence Listing; German.
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                                                                                                                             Homo sapiens.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI000110-ABH2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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06-APR-2001; 2001WO-IB000713.
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Les 11; Conservative
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Claim 1; SEQ ID NO 182697; 29pp + Sequence Listing; German.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PMA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically precreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The contral nervous system, cardiovascular and metabolic disorders. The cligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99899 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13; Best Local Similarity 84.6%; Pred. No. 1.1e+03; Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps

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947 GTTTAATGTATCG 959 || || || || || || 1 1 GTGTAATGTATAG 13

SULT 1004 F63798/c

ABF63798 standard; DNA; 13 BP

ABF63798;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 163795 for detecting SNP TSC0010383.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 163795; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF9989, ABH00010-ABF9989 and ABI00010-ABF9073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

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                                                                                                                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Pred. No. 1.1e+03;
0; Mismatches 2; Indels
                                                                                Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
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                                                 Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;
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was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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84.6%;
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84.6%;
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Matches 11; Conservative
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Best Local Similarity
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central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                  Piepenbrock C,
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                                                                                                                                                                                                          WPI; 2001-657177/75
                                                                                                                                                                                                                                                             methylation status.
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                                                 WO200177384-A2.
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                          Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                Oligonucleotide SEQ ID NO 256020 for detecting SNP TSC0062378.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels
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les 11; Conserv
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Set of oligonucleotides, useful for diagnosis and cell typing, : designed to detect single-nucleotide polymorphisms and cytosine
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Olek A,

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and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                  This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                           Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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Query Match Best Local Si Matches 11

ABC09421;

SULT 1009 C09421

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, adriovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at Claim 1; SEQ ID NO 36714; 29pp + Sequence Listing; German.

typing, i cytosine

Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

Claim 1; SEQ ID NO 9412; 29pp + Sequence Listing; German.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

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Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
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Query Match
Best Local Similarity 84.6%;
Matches 11; Conservative
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                                                                                                                                            peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                        Oligonucleotide SEQ ID NO 64483 for detecting SNP TSC0017004.
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84.6%;
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Best Local Similarity
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21-FEB-2002
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WO200177384-A2

ABC64466 standard; DNA; 13 BP

ABC64466/c

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84.6%;
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Best Local Similarity 84.6%,
Thes 11; Conservative
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Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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Best Local Similarity 84.6%;
Matches 11; Conservative (
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Berlin K;

Olek A, Piepenbrock C, (EPIG-) EPIGENOMICS AG.

WPI; 2001-657177/75.

06-APR-2001; 2001WO-IB000713.

18-OCT-2001.

SULT 1014 C66551 07-APR-2000; 2000DE-01019173

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99889, ABF00010-ABF99989, ABH00010-ABH99988 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                 German.
                                                                                                            Claim 1; SEQ ID NO 66568; 29pp + Sequence Listing;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                        13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03;
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Matches 11; Conservative
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                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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RESULT
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Matches 11; Conservative

Best Local Similarity

Oligonucleotide SEQ ID NO 152194 for detecting SNP TSC0038456.

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Gaps

0;

2; Indels

13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03;

0; Mismatches

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olek A,

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99889, ABH00010-ABH99889 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                               Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 229781; 29pp + Sequence Listing; German.
07-APR-2000; 2000DE-01019173.
                                                   (EPIG-) EPIGENOMICS AG
                                                                                                         Piepenbrock
                                                                                                                                                               WPI; 2001-657177/75
                                                                                                                                                                                                                                                                        methylation status.
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                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 152194; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ch 13.4%; Score 9.8; DB 1; Length 13; 1 Similarity 84.6%; Pred. No. 1.1e+03; 11; Conservative 0; Mismatches 2; Indels
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Best Local Similarity
Matches 11; Conserv
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                                                                                                                                     Homo sapiens.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                    13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03;
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Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;
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SULT 1019 H29804/c

Page 471

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at Sequence 13 BP; 6 A; 0 C; 5 G; 2 T; 0 U; 0 Other; was obtained in electronic format from W1 ftp.wipo.int/pub/published_pct_sequences

13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels 926 TITIAICCCICCT 938 Conservative 13 rerrareactecr 1 Local Similarity les 11; Conserv Query Match Matches 8

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Gaps

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Oligonucleotide SEQ ID NO 210297 for detecting SNP TSC0005129. ABH10320 standard; DNA; 13 BP 22-FEB-2002 ABH10320; ABH10320/

(first entry)

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 210297; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at

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                                  13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03;
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Sequence 13 BP; 7 A; 0 C; 3 G; 3 T; 0 U; 0 Other;
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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels

Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;

ftp.wipo.int/pub/published_pct_sequences

Homo sapiens.

18-OCT-2001

22-FEB-2002

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF09989, ABF00010-ABF9998 and ABI00010-ABF82073
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                           Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 243526; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                         methylation status.
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                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer: CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                            Oligonucleotide SEQ ID NO 243360 for detecting SNP TSC0059367.
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13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels
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                      ABH43383 standard; DNA; 13
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22-FEB-2002

ABH43549;

SULT 1024 H43549

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Gaps

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acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory. Central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE09989, ABF00010-ABE99989, ABF00010-ABE99989 and ABI00010-ABE99989. Tepresent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but twipo.int/pub/published_pct_sequences
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                                                                                                                                                                        This invention describes novel oligonucleotide primers or peptide nucleic
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                                        oet or oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oligonucleotide SEQ ID NO 17635 for detecting SNP TSC0003780.
                                                                                                                                  Claim 1; SEQ ID NO 256017; 29pp + Sequence Listing; German.
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Matches
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Berlin K;

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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for disapposis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99889, ABF0010-ABF99889, ABF00010-ABF99889, ABF00010-ABF99889 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                               13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03;
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Best Local Similarity
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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Oligonucleotide SEQ ID NO 106599 for detecting SNP TSC0026700.

21-FEB-2002 (first entry)

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                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
 Gaps
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Indels
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Pred. No. 1.1e+03;
0; Mismatches 2;
Mismatches
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84.6%;
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11; Conservative
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Best Local Similarity
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Matches
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH0010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

ftp.wipo.int/pub/published_pct_sequences

typing, i

Claim 1; SEQ ID NO 106599; 29pp + Sequence Listing; German.

of oligonucleotides, useful for diagnosis and cell igned to detect single-nucleotide polymorphisms and

methylation status.

designed

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Ϋ, Berlin

Piepenbrock C,

olek A,

WPI; 2001-657177/75.

(EPIG-) EPIGENOMICS AG

06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173.

WO200177384-A2.

18-OCT-2001.

Homo sapiens

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                          Score 9.8; DB 1; Length 13; Pred. No. 1.18+03; 0; Mismatches 2; Indels
Sequence 13 BP; 6 A; 0 C; 4 G; 3 T; 0 U; 0 Other;
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                             13.4%;
84.6%;
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ABPC6603
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AC ABF06605
AC ABF06605
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DT 21-FBB-2
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KW SNP; Sin
KW peptide
KW central
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11; Conservative

Best Loc Matches

940 TICATIGGITIAA 952

13

BP.

ABF06602 standard; DNA; 13

SULT 1029

ABF06602,

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Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                         (EPIG-) EPIGENOMICS
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Best Local Similarity
Matches 11; Conserv
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Berlin K;

Piepenbrock C,

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acid (PNA) oligomers for detecting single muclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC39989, ABF0010-ABF9989, ABF0010-ABF9989 and ABI0010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                                                                                                                 This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oligonucleotide SEQ ID NO 108302 for detecting SNP TSC0027114.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03;
                                                                    Claim 1; SEQ ID NO 7398; 29pp + Sequence Listing; German.
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ID ABF08305,C

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ARE ABF08305,
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21-FEB-2002 (first entry)
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SNP; single nucleotide polymo:
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Homo sapiens.
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NO200177384-A2.
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NO200177384-A2.
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NO 19-PR-2001, 20010E-01019173.
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NO 7-APR-2000, 2000DE-01019173.
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NO 7-APR-2000, 2000DE-01019173.
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NO 7-APR-2000, 2000DE-01019173.
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Colliquoucleotides, useff PT

Gesigned to detect single-nuc PT

Methylation status.
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Claim 1; SEQ ID NO 108302; 29
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This invention describes nove cc and cytosine methylation stat
CC

and cytosine methylation stat
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84.6%;
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methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99889, ABF00010-ABF9989, ABF00010-ABF9989, and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 106600; 29pp + Sequence Listing; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; Ative 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                  Berlin K;
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                        06-APR-2001; 2001WO-IB000713.
                                                                                                07-APR-2000; 2000DE-01019173
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Gaps

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data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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Sequence 13 BP; 8 A; 1 C; 1 G; 3 T; 0 U; 0 Other;

Gaps ., 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels Query Match
Best Local Similarity 84.69

0

SULT 1033

ABC84497 standard; DNA; 13 BP

ABC84497;

(first entry) 21-FEB-2002

Oligonucleotide SEQ ID NO 84514 for detecting SNP TSC0021261.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75

set or oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 84514; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 2 C; 1 G; 7 T; 0 U; 0 Other;

Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03; 0; Mismatches 2; Indels Query Match 13.4%; Best Local Similarity 84.6%; Matches 11; Conservative

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                              Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
                                                                            Oligonucleotide SEQ ID NO 133696 for detecting SNP TSC0033329.
                                                                                                                                                                                                                                                           Berlin K;
                  ABF33699 standard; DNA; 13 BP
                                                                                                                                                                                                06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                   07-APR-2000; 2000DE-01019173.
                                                         (first entry)
                                                                                                                                                                                                                                                          Piepenbrock C,
                                                                                                                                                                                                                                      (EPIG-) EPIGENOMICS AG
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                                                                                                                                                                                                                                                                                                                    methylation status.
                                                                                                                                                         WO200177384-A2.
                                                                                                                                       Homo sapiens.
                                                         21-FEB-2002
                                                                                                                                                                            18-OCT-2001.
                                      ABF33699;
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RESULT 1034
          ABF33699
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and merabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF99899 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPD at

Claim 1; SEQ ID NO 133696; 29pp + Sequence Listing; German.

Seguence 13 BP; 4 A; 3 C; 1 G; 5 T; 0 U; 0 Other;

.; 0 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; Attive 0; Mismatches 2; Indels 11; Conservative Query Match Best Local Similarity Matches

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Gaps

ò g RESULT 1035

ABF53570 standard; DNA; 13 BP.

ABF53570; BXXXXXXXXXXXX

(first entry) 21-FEB-2002

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Gaps

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Oligonucleotide SEQ ID NO 153567 for detecting SNP TSC0038820

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

schultz1-899.rng

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pot_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                  Set of oligonucleotides, useful for diagnosis and cell typing, addesigned to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligonucleotide SEQ ID NO 179614 for detecting SNP TSC0044465.
                                                                                                                                                                  Claim 1; SEQ ID NO 179613; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
                                      Berlin K;
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                                  Piepenbrock C,
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     (EPIG-) EPIGENOMICS AG.
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                                                                   WPI; 2001-657177/75
                                                                                                                                     methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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nucleic acid; cytosine methylation; cardiovascular; primer; ss; nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide SEQ ID NO 179613 for detecting SNP TSC0044465.
                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 153567; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 13;
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                                                                                                                                                                                                                                                Berlin
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                                                                                                                                               06-APR-2001; 2001WO-IB000713.
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peptide nucleic acid;
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                                                                                                                                                                                                                                                                                                                                                   methylation status.
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                                                Homo sapiens
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Matches
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Gaps

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acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC39989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989 and ABI00101-ABF82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
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Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;

Gaps ; 0 Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03; 0; Mismatches 2; Indels 13.4%; 84.6%; 11; Conservative Query Match Best Local Similarity Matches

0

SULT 1038

ABF82323 standard; DNA; 13

BP.

ABF82323;

(first entry)

22-FEB-2002

Oligonucleotide SEQ ID NO 182320 for detecting SNP TSC0045058.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001,

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C,

Berlin K;

WPI; 2001-657177/75

set or oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 182320; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABH99889 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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             Length 13;
                                          Indels
Score 9.8; DB 1; Le
Pred. No. 1.1e+03;
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84.6%;
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                        Best Local Similarity Matches 11; Conser
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ID ABH34
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schultz1-899.rng

WO200177384-A2.

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                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                    Oligonucleotide SEQ ID NO 234619 for detecting SNP TSC0057256.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels
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Best Local Similarity 84.6%;
Matches 11; Conservative
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                                                     (first entry)
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                                                   22-FEB-2002
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               ABH34642;
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPD at

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Berlin K;

Piepenbrock C,

olek A,

WPI; 2001-657177/75.

(EPIG-) EPIGENOMICS AG

06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173. Claim 1; SEQ ID NO 210395; 29pp + Sequence Listing; German.

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

Oligonucleotide SEQ ID NO 210395 for detecting SNP ISC0051377.

BP.

ABH10418 standard; DNA; 13

RESULT 1041 ABH10418 ABH10418;

22-FEB-2002 (first entry)

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Gaps

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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels

941 TCATTGGTTTAAT 953

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Local Similarity 84.6 les 11; Conservative

Matches

Query Match

Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;

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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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Claim 1; SEQ ID NO 211665; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABF00010-ABE99899, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at was obtained in electronic format from WI ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;

Gaps :0 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; 2; Indels 0; Mismatches 11; Conservative Best Local Similarity Query Match Matches

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1043

ABH11689 standard; DNA; 13

BP.

ABH11689;

(first entry) 22-FEB-2002 Oligonucleotide SEQ ID NO 211666 for detecting SNP TSC0051615.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C, WPI; 2001-657177/75. of oligonucleotides, useful for diagnosis and cell typing, igned to detect single-nucleotide polymorphisms and cytosine

Set of oligonucleot designed to detect methylation status,

Claim 1; SEQ ID NO 211666; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

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oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                    Sequence 13 BP; 0 A; 7 C; 0 G; 6 T; 0 U; 0 Other;
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Best Local Similarity 84.6'
Matches 11; Conservative
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                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                Oligonucleotide SEQ ID NO 191287 for detecting SNP TSC0047057
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                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 245561 for detecting SNP TSC0059959.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                     acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for disapsses and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABE9989, ABF00010-ABE9989, and ABI0010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                        This invention describes novel oligonucleotide primers or peptide nucleic
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Claim 1; SEQ ID NO 69715; 29pp + Sequence Listing; German
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   RESULT 1051
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                                                                                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                Query Match
13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels
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                          Sequence 13 BP; 7 A; 0 C; 2 G; 4 T; 0 U; 0 Other;
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Best Local Similarity 84.69
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This invention describes novel oligomucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cycosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989, and ABI00010-ABE80010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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ABC80739 standard; DNA; 13
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Homo sapiens.

18-OCT-2001

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                  Claim 1; SEQ ID NO 114856; 29pp + Sequence Listing; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; vative 0; Mismatches 2; Indels
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Berlin
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Pred. No. 1.18+03;
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Homo sapiens.

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oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligoners are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99899, ABF00010-ABH99989 and ABI00010-ABH82073 data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPD at
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Best Local Similarity 84.6'
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13.4%; Score 9.8; DB 1; Length 13;

Query Match

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                         Oligonucleotide SEQ ID NO 139995 for detecting SNP TSC0035065.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 139995; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels
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                                                                                                                      ABF39998 standard; DNA; 13 BP
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941 TCATTGGTTTAAT 953
                                                                                                                                                                                          (first entry)
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                                TGATTTGTTTAAT 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (EPIG-) EPIGENOMICS AG.
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                                                                                                                                                                                                                                                                                                                                   Homo sapiens
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AC ABF9
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 221438; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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                                             06-APR-2001; 2001WO-IB000713.
                                                                                        07-APR-2000; 2000DE-01019173.
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Best Local Similarity 84.6
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18-OCT-2001
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                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                  Oligonucleotide SEQ ID NO 193484 for detecting SNP TSC0047598.
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ABH21461;

SULT 1058

Matches

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German

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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cycosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but fitp.wipo.int/pub/published_pct_sequences
                                                                                                  invention describes novel oligonucleotide primers or peptide nucleic
detect single-nucleotide polymorphisms and cytosine
                                                            SEQ ID NO 228564; 29pp + Sequence Listing;
                                                                                                                                                                                                                                                                                                                                                                Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;
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84.6%;
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Best Local Similarity 84.00,
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Score 9.8; DB 1; Length 13; Pred. No. 1.18+03; 0; Mismatches 2; Indels

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                       Oligonucleotide SEQ ID NO 181883 for detecting SNP ISC0044958.
                                                                                                                                                                                      Berlin K;
                                                                                                                                      06-APR-2001; 2001WO-IB000713.
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                                                                                                                                                                                     Olek A, Piepenbrock C,
                                                                                                                                                                     (EPIG-) EPIGENOMICS AG
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH82073 Set of oligonucleotides, useful for diagnosis and cell typing, addesigned to detect single-nucleotide polymorphisms and cytosine Claim 1; SEQ ID NO 181883; 29pp + Sequence Listing; German. methylation status.

WPI; 2001-657177/75.

900 CCTGGTCATTTTC 912

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represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                  Length 13;
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                                                                                                                            13.4%; Score 9.8; DB 1; Length 13
84.6%; Pred. No. 1.18+03;
ive 0; Mismatches 2; Indels
                                                                                           Sequence 13 BP; 0 A; 0 C; 2 G; 11 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                      ABF61608 standard; DNA; 13 BP.
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                                                                                                                                Query Match
Best Local 8
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels
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                                                                                                     Homo sapiens.
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ABH46421
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                                                                                                                                                                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                  ID NO 237713 for detecting SNP TSC0057979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 237713; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                        (first entry)
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       CCTTTTCATTTTC
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Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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Best Local Similarity 84.69
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methylation status
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acid (FNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE09989, ABF00010-ABE9989, ABH0010-ABE9989 and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from MIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
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invention describes novel oligonucleotide primers or peptide nucleic
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Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                      aid (PN) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF0010-ABF99989, ABH00010-ABH99989 and ABT00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                   This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
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                                                                                                                                                                                                                                                                                  Claim 1; SEQ ID NO 246398; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels
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                                                                      Berlin K;
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Query Match

Matches

ABC99122;

SULT 1067

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genemic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF8003 data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPD at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                      Oligonucleotide SEQ ID NO 2469 for detecting SNP TSC0000994.
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  ABC02478 standard; DNA; 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                           Match 13.4%; Score 9.8; DB 1; Length 13; Local Similarity 84.6%; Pred. No. 1.1e+03; es 11; Conservative 0; Mismatches 2; Indels
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Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
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Best Local Similarity 84.6%;
Matches 11; Conservative
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3SULT 1068 3C02478

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schultz1-899.rng

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABH9989, ABF00010-ABH9989, ABF00010-ABH9989, ABF00010-ABH99989, ABF00010-ABH9989, ABF00010-ABH99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  designed to detect single-nucleotide polymorphisms and cytosine
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Les 11; Conserv
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Gaps ; 0

1 Grrrarrgrrrcg 13

ABC59210 standard; DNA; 13 BP 21-FEB-2002 ABC59210; RESULT 1070 ABC59210

(first entry)

Oligonucleotide SEQ ID NO 59227 for detecting SNP TSC0015869.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 59227; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligoners for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99899 and ABI00010-ABI2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

Gaps .. 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels 2; Indels 11; Conservative Local Similarity Matches

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941 TCATTGGTTTAAT 953 g

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ABF10012 standard; DNA; 13 RESULT 1071 ABF10012/c

BP

ABF10012;

21-FEB-2002 (first entry)

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Oligonucleotide SEQ ID NO 110009 for detecting SNP TSC0027487.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 110009; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNN. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory,

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central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABC99989, ABF00010-ABC99899, ABF00010-ABC99899, ABF00010-ABC99899, ABF00010-ABC99989, ABF00010-ABC99899, ABF00010-ABC99899, ABF00010-ABC99899, ABF00010-ABC99899, ABF00010-ABC99989, ABF00010-ABC998989, ABF00010-ABC99898, ABF00010-ABC9988, ABF00010-ABC9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 13;
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84.6%; Pred. No. 1.16+03;
ive 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                               was obtained in electronic format from Wl
ftp.wipo.int/pub/published_pct_sequences
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic
                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                Oligonucleotide SEQ ID NO 133695 for detecting SNP TSC0033329.
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Berlin K;

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, coingomers are also used for detecting call type differentiation. ABC0010 ans are also used for detecting cell type differentiation. ABC0010 ans are also used for detecting cell type differentiation. ABC0010 ans are also used for detecting cell type differentiation. ABC0010 ans are also used for detecting cell type differentiation. ABC0010 ans are also used for detecting cell type differentiation. ABC0010 ans are also used for detecting cell type differentiation. ABC0010 ans are also used for detecting to the invention. NoTE: The sequence was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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Claim 1; SEQ ID NO 197568; 29pp + Sequence Listing; German.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABC0010-ABE9989, ABM00010-ABH99899 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;

Gaps ; 0 Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03; 0; Mismatches 2; Indels Query Match
Best Local Similarity 84.6%; 11; Conservative Matches

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SULT 1077

BP. ABF99128 standard; DNA; 13

ABF99128;

(first entry) 22-FEB-2002

Oligonucleotide SEQ ID NO 199125 for detecting SNP TSC0049008.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 199125; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

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                                                                             Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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                                             Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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central nervous system; gastrointestinal; respiratory; immune; metabolic.
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 207533; 29pp + Sequence Listing; German.
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Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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84.6%;
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                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                     ABF78482 standard; DNA; 13 BP.
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acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF99899, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                    This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                   Piepenbrock C,
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.; 0 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; cive 0; Mismatches 2; Indels 941 TCATTGGTTTAAT 953 1 rcarrcgrrcaar 13 11; Conservative Query Match Best Local Similarity Matches 11; Conserv

Sequence 13 BP; 3 A; 3 C; 1 G; 6 T; 0 U; 0 Other;

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Gaps

SSULT 1082

ABH34643 standard; DNA; 13 22-FEB-2002 ABH34643; 3H34643

BP.

Oligonucleotide SEQ ID NO 234620 for detecting SNP TSC0057256. (first entry)

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 234620; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

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and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, carding scell type differentiation. ABC00010-ABC99889, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but two.wipo.int/pub/published_pot_sequences
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Berlin K; 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173 Piepenbrock C, (EPIG-) EPIGENOMICS AG. WPI; 2001-657177/75. WO200177384-A2. Homo sapiens, 18-OCT-2001. olek A,

Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 214382; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a reange of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but twipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 5 C; 1 G; 6 T; 0 U; 0 Other;

schultz1-899.rng

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Oligonucleotide SEQ ID NO 108301 for detecting SNP TSC0027114.

(first entry)

21-FEB-2002

ABF08304;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligonucleotide SEQ ID NO 104673 for detecting SNP TSC0026175.
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       Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 108301; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03;
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                                                                                                                                                                                                                                                                (EPIG-) EPIGENOMICS AG
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                                               WO200177384-A2.
Homo sapiens.
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WO200177384-A2

BP.

ABF08304 standard; DNA; 13

RESULT 1085

ABF08304

18-OCT-2001

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF99999, ABH00010-ABH99999 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
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of oligonucleotides, useful for diagnosis and cell typing, is
                  designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                      Claim 1; SEQ ID NO 35611; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 84066; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                        Berlin K;
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                                                                                                                                 07-APR-2000; 2000DE-01019173.
                                                                                 06-APR-2001; 2001WO-IB000713
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    909 TITCTTIGGICTT 921
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13 TTTGTTTGGTTTT 1
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                                                                                                                                                                                     (EPIG-) EPIGENOMICS
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WO200177384-A2 Homo sapiens.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretracted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but fup.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the Oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Set of oligonucleotides, useful for diagnosis and cell typing, addesigned to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotide SEQ ID NO 40116 for detecting SNP TSC0012202.
                                                                                                                                                         13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 40116; 29pp + Sequence Listing; German.
                                                                                                                     Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                          ABC40099 standard; DNA; 13 BP
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                                                                                                                                                                                                Matches 11; Conservative
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                                                                                                                                                                              Best Local Similarity
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                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                       Oligonucleotide SEQ ID NO 91418 for detecting SNP TSC0022889.
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                                ABC91401 standard; DNA; 13
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                                                                                                   ABC91401;
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Matches 11; Conservative

Local Similarity

Query Match

Oligonucleotide SEQ ID NO 91495 for detecting SNP TSC0022909

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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ative 0; Mismatches 2; Indels

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SNP, single nucleotide polymorphism, human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                             Claim 1; SEQ ID NO 119922; 29pp + Sequence Listing; German.
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acid (PNA) oligomers for detecting single mucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used (alagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                        This invention describes novel oligonucleotide primers or peptide nucleic
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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels 931 TCCCTCCTCTTCA 943 Local Similarity 84.6 18 11; Conservative recercaratrea 1 13 Query Match Best Loca Matches

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ABF34215 standard; DNA; 13 (first entry) 21-FEB-2002 ABF34215; RESULT 1094 43F34215

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide SEQ ID NO 134212 for detecting SNP TSC0033456. WO200177384-A2 18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C,

Berlin K;

WPI; 2001-657177/75

oct or oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 134212; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PMA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABE99989, ABH00010-ABE99989 and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences

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                                 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03;
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                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                         Oligonucleotide SEQ ID NO 144002 for detecting SNP TSC0036164.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC099989, ABC0010-ABE99899, ABC0010-ABE99899 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
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This invention describes novel oligonucleotide primers or peptide nucleic
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                                                                                              Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 151811; 29pp + Sequence Listing; German.
WPI; 2001-657177/75
                                                                                                                                                                                                                   methylation status.
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Length 13; 2; Indels Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other; Score 9.8; DB 1; Pred. No. 1.1e+03; Mismatches ; 13.4%; 84.6%; 940 TICATIGGITTAA 952 Conservative Query Match Best Local Similarity 11; Matches ें

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Gaps

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Oligonucleotide SEQ ID NO 178383 for detecting SNP TSC0009992. ABF78386 standard; DNA; 13 22-FEB-2002 ABF78386 ABF7838

(first entry)

BP.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine WPI; 2001-657177/75.

Berlin

Piepenbrock C,

olek A,

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from NIPO at

13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03;

Query Match Best Local Similarity

Sequence 13 BP; 2 A; 4 C; 1 G; 6 T; 0 U; 0 Other;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

Claim 1; SEQ ID NO 178383; 29pp + Sequence Listing; German.

methylation status.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a

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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABCO0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99899 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formet from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99899, ABH00010-ABH99899 and ABI00010-ABI32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                         Oligonucleotide SEQ ID NO 210396 for detecting SNP TSC0051377.
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                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Query Match

SULT 1102

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF0010-ABF9989, ABH00010-ABF9989 and ABI00010-ABF92073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                                         Claim 1; SEQ ID NO 237489; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                            Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
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                06-APR-2001; 2001WO-IB000713.
                                                                              07-APR-2000; 2000DE-01019173
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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; Live 0; Mismatches 2; Indels

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABE99989, ABH00010-ABH99989 and ABI00010-ABI82071 represent the oligomers described in the invention. NOTE: The sequence
                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
                                                                                                                           Oligonucleotide SEQ ID NO 187617 for detecting SNP TSC0007370.
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                ABF87620 standard; DNA; 13
                                                                                         (first entry)
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Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine

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WPI; 2001-657177/75

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ABC17547 standard; DNA; 13

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data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                 Query Match 13.4%; Score 9.8; DB 1; Length 13; Best Local Similarity 84.6%; Pred. No. 1.1e+03; Matches 11; Conservative 0; Mismatches 2; Indels
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer: CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                             Oligonucleotide SEQ ID NO 17554 for detecting SNP TSC0003772.
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylution status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC09989, ABF00010-ABF99899, ABF00010-ABH9989 and ABT00010-ABE8073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 44369; 29pp + Sequence Listing; German.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                German.
                                                                                                        useful for diagnosis and cell
                                                                                                                                                                            Claim 1; SEQ ID NO 96157; 29pp + Sequence Listing;
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                                          Berlin K;
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acid; cytosine methylation; cardiovascular; primer; ss; system; gastrointestinal; respiratory; immune; metabolic.
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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE09999, ABF00010-ABE09999, ABH00010-ABE099999 and ABI00010-ABE182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 U; 0 Other;
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Best Local Similarity 84.6'
Matches 11; Conservative
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Oligonucleotide SEQ ID NO 100942 for detecting SNP TSC0025123.

(first entry)

21-FEB-2002

ABF00945;

BP.

ABF00945 standard; DNA; 13

RESULT 11 ABF00945

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABF9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at

Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;

ftp.wipo.int/pub/published_pct_sequences

Claim 1; SEQ ID NO 25862; 29pp + Sequence Listing; German

methylation status.

Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine

Berlin K;

Olek A, Piepenbrock C, (EPIG-) EPIGENOMICS AG

WPI; 2001-657177/75.

methylation status

06-APR-2001; 2001WO-IB000713.

WO200177384-A2. Homo sapiens.

18-OCT-2001.

07-APR-2000; 2000DE-01019173.

schultz1-899.rng

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) oligomers for detecting single nucleotide polymorphisms (SNP) oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, clipomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic form part of the printed specification, but
                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                   Oligonucleotide SEQ ID NO 2468 for detecting SNP TSC0000994.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           was obtained in electronic format from W1
ftp.w1po.int/pub/published_pct_sequences
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                                                 20-FEB-2002 (first entry)
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Matches 11; Conservative
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Berlin K;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, coligomers are also used for detecting cell type differentiation. ABC09989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF82073 tepsesoft the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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                                                         06-APR-2001; 2001WO-IB000713.
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                                                                                                                  (EPIG-) EPIGENOMICS AG
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WO200177384-A2
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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels

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schultz1-899.rng

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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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Claim 1; SEQ ID NO 7399; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and eycosine methylation status in chemically pretracted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABPR0010-ABF99989, ABR00010-ABF99989, ABR00010-ABF99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 5 A; 0 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13; Best Local Similarity 84.6%; Pred. No. 1.1e+03; Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

SULT 1116

) ABC65245 standard; DNA; 13 BP.

ABC65245;

21-FEB-2002 (first entry)

Oligonuclectide SEQ ID NO 65262 for detecting SNP TSC0017182.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001.

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 65262; 29pp + Sequence Listing; German.

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This invention describes novel oligomucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically precreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

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oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic forms from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                Score 9.8; DB 1; Length 13; Pred. No. 1.18+03; 0; Mismatches 2; Indels
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                                                                                                                                Sequence 13 BP; 9 A; 4 C; 0 G; 0 T; 0 U; 0 Other;
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acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE09999, ABF0010-ABE9999 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PMA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent din out form part of the printed specification, but was obtained in electronic format from WIPO at
                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 193481 for detecting SNP TSC0047598.
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ftp.wipo.int/pub/published_pct_sequences
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ABF93484;

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The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from NIPO at
                                                                                                         This invention describes novel oligomucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Claim 1; SEQ ID NO 221732; 29pp + Sequence Listing; German.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Ϋ. Berlin

Piepenbrock C,

olek A,

WPI; 2001-657177/75.

(EPIG-) EPIGENOMICS AG.

06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173.

WO200177384-A2 Homo sapiens

18-OCT-2001.

Oligonucleotide SEQ ID NO 177445 for detecting SNP TSC0010778.

(first entry)

22-FEB-2002

ABF77448;

ABF77448 standard; DNA; 13 BP.

ABF77448/

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                                                                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                  Gaps
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                                                                       Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03; 0; Mismatches 2; Indels
                                   Sequence 13 BP; 6 A; 3 C; 1 G; 3 T; 0 U; 0 Other;
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ftp.wipo.int/pub/published_pct_sequences
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                                                                                         Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels
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Matches

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Query Match

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PRA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABR00010-ABL99989, ABR00010-ABL99989, ABR00010-ABL99989, ABR00010-ABL9989 and ABL00010-ABL82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                         Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; Ative 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 232553; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                         13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; Live 0; Mismatches 2; Indels
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Best Local Similarity 84.6'
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84.6%;
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Homo sapiens.

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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and mecabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC099889, ABF00010-ABE99889, ABF00010-ABE99889, ABF00010-ABE99889, ABF00010-ABE99889, ABF00010-ABE99889 and ABI0010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                      methylation status.
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                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                    Oligonucleotide SEQ ID NO 191909 for detecting SNP TSC0047221.
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Best Local Similarity 84.6%;
Matches 11; Conservative
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Homo sapiens

22-FEB-2002

ABF91913;

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                                                                                              This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                           Claim 1; SEQ ID NO 242458; 29pp + Sequence Listing; German
                                                                                                                                                                                                                                                                                                                                                                                                                        13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03;
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represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                     13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels
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                                                                                                   Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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ABC17629 standard; DNA; 13
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Oligonucleotide SEQ ID NO 100941 for detecting SNP TSC0025123.

(first entry)

21-FEB-2002

ABF00944;

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1944/c ABF00944 standard; DNA; 13

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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84.6%;
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Best Local Similarity 84.6
Matches 11; Conservative
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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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    (EPIG-) EPIGENOMICS AG.
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               Olek A,
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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99999, ABF00010-ABE99999, ABF00010-ABE99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastroinfestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99899, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. This invention describes novel oligonucleotide primers or peptide nucleic Set of oligonucleotides, useful for diagnosis and cell typing, a designed to detect single-nucleotide polymorphisms and cytosine Oligonucleotide SEQ ID NO 27675 for detecting SNP TSC0007753. 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; Live 0; Mismatches 2; Indels Claim 1; SEQ ID NO 27675; 29pp + Sequence Listing; German. Sequence 13 BP; 5 A; 3 C; 0 G; 5 T; 0 U; 0 Other; was obtained in electronic format from WI ftp.wipo.int/pub/published_pct_sequences Berlin K; BP 06-APR-2001; 2001WO-1B000713. 07-APR-2000; 2000DE-01019173 ABC27658 standard; DNA; 13 943 ATTGGTTTAATGT 955 20-FEB-2002 (first entry) Query Match Best Local Similarity 84.6' 13 Aragerararer 1 Piepenbrock C, (EPIG-) EPIGENOMICS AG. WPI; 2001-657177/75. methylation status. WO200177384-A2. Homo sapiens. 18-0CT-2001. ABC27658; Olek A, RESULT 1139 ABC27658 8*555555555555 8 g This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ö SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Gaps set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status. ; 0 Oligonucleotide SEQ ID NO 2470 for detecting SNP ISC0000994. 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; cive 0; Mismatches 2; Indels Claim 1; SEQ ID NO 1421; 29pp + Sequence Listing; German. Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other; was obtained in electronic format from WI ftp.wipo.int/pub/published_pct_sequences Berlin K; Berlin K; ABC02479 standard; DNA; 13 BP 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173 940 TICATIGGITTAA 952 (first entry) rrrarregraraa 13 11; Conservative Piepenbrock C,

(first entry)

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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designed to detect single-nucleotide polymorphisms and cytosine
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ABC79542 standard; DNA; 13 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels
                                       13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; Live 0; Mismatches 2; Indels
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Berlin K;

Piepenbrock C,

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosite methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic formmat from WIPO at
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory,
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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     ligonucleotides, useful for diagnosis and cell typing, it detect single-nucleotide polymorphisms and cytosine
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                          Claim 1; SEQ ID NO 12398; 29pp + Sequence Listing; German.
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of oligonucleotides, useful for
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central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABR00010-ABR99899, ABR00010-ABR99899, ABR00010-ABR99899, ABR00010-ABR99899 and ABI00010-ABB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

0 Gaps ., Query Match 13.4%; Score 9.8; DB 1; Length 13; Best Local Similarity 84.6%; Pred. No. 1.1e+03; Matches 11; Conservative 0; Mismatches 2; Indels

SULT 1145

ABC91479 standard; DNA; 13

BP

ABC91479;

(first entry) 21-FEB-2002 Oligonuclectide SEQ ID NO 91496 for detecting SNP TSC0022909.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SBQ ID NO 91496; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF0010-ABH99989 and ABI00010-ABI22073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Seguence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

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Gaps
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Query Match
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels
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915 Н 903 GGICATITICITI 13 GGTAATTTTTTT 8 Db

ABF19924,

1924/c ABF19924 standard; DNA; 13 BP.

ABF19924;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 119921 for detecting SNP TSC0029932.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Berlin K; ΰ Piepenbrock Olek A,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 119921; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (FNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989, and ABI00010-ABE99989 and ABI00010-ABE99989 and ABI00010-ABE99989 and ABI00010-ABE99980 and a sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 8 A; 0 C; 5 G; 0 T; 0 U; 0 Other

Gaps ., 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; 2; Indels 0; Mismatches Best Local Similarity 84.6 Matches 11; Conservative Query Match

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RESULT 1147 ABF20728

BP. ABF20728 standard; DNA; 13

ABF20728;

21-FEB-2002 (first entry)

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acid (PNA) olignmers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABC9989, ABH00010-ABH99989 and ABI00010-ABH82073 data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide nolymershiems (cmp) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine Oligonucleotide SEQ ID NO 120725 for detecting SNP TSC0030124. Claim 1; SEQ ID NO 120725; 29pp + Sequence Listing; German. Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other; Berlin K; 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173 Olek A, Piepenbrock C, (EPIG-) EPIGENOMICS WPI; 2001-657177/75 methylation status. WO200177384-A2. Homo sapiens 18-OCT-2001

· 0 Gaps ; 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.18+03; ative 0; Mismatches 2; Indels Query Match 13.4 Best Local Similarity 84.6 Matches 11; Conservative

ABF31355 standard; DNA; 13 RESULT 1148

BP,

ABF31355;

(first entry) 21-FEB-2002

Oligonucleotide SEQ ID NO 131352 for detecting SNP TSC0032783.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting call type differentiation. ABC09199, ABF00010-ABE9989, ABH00010-ABH99989 and ABI00010-ABI82073 data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPD at
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                                                                     (EPIG-) EPIGENOMICS AG
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide SEQ ID NO 133002 for detecting SNP TSC0033182. (first entry) 21-FEB-2002

ABF33005 standard; DNA; 13 BP.

1149

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ABF33005 RESULT

ABF33005;

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Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173,

(EPIG-) EPIGENOMICS AG

Berlin Olek A, Piepenbrock C,

WPI; 2001-657177/75.

13 Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.

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Claim 1; SEQ ID NO 133002; 29pp + Sequence Listing; German.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABP00010-ABP99989 and ABF00010-ABF32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 5 C; 1 G; 5 T; 0 U; 0 Other;

Gaps ; 0 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ative 0; Mismatches 2; Indels 0; Mismatches Conservative Local Similarity ses 11; Conserv Query Match Matches

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931 TCCCTCCTCTCA 943

1 recerecharica 13

SULT 1150

BP. ABF35070 standard; DNA; 13

ABF35070;

(first entry) 21-FEB-2002 Oligonucleotide SEQ ID NO 135067 for detecting SNP TSC0033671.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 135067; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABH00010-ABE99899 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

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919 CTTTGCCTTTTAT 931

CTTTTTCTTTAT 1

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cycosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABH9989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
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                                                                               Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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                                               Sequence 13 BP; 3 A; 1 C; 3 G; 6 T; 0 U; 0 Other;
was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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84.6%;
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Matches 11; Conservative
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Best Local Similarity
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABR00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                     Oligonucleotide SEQ ID NO 148100 for detecting SNP TSC0037394.
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Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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                                  ABF48103 standard; DNA; 13 BP
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84.6%;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABR82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                         Berlin K;
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                                                                                      ligonucleotides, useful for diagnosis and cell typing, is to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                              Claim 1; SEQ ID NO 161606; 29pp + Sequence Listing; German.
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Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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al Similarity 84.6%;
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                      Olek A, Piepenbrock
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and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and etabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fib.wipo.int/pub/published_pct_sequences
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Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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84.6%;
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Matches 11; Conservative
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Berlin K;

Olek A, Piepenbrock C, (EPIG-) EPIGENOMICS AG

WPI; 2001-657177/75.

06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173.

WO200177384-A2.

18-OCT-2001.

Homo sapiens

Oligonucleotide SEQ ID NO 162874 for detecting SNP TSC0040950.

(first entry)

22-FEB-2002

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acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC09989, ABF00010-ABF9989, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03; Mismatches 2; Indels
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
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WO200177384-A2

ABF62877 standard; DNA; 13 BP

RESULT 1158

ABF62877

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Gaps

. 0

13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ative 0; Mismatches 2; Indels

940 TICATIGGITIAA 952 TTGATTAGTTTAA 13

Conservative

Local Similarity

11;

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ABH63369;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC09989, ABC0010-ABE9989, ABC0010-ABE9989, ABC0010-ABE9989, ABC0010-ABE9989, ABC0010-ABE9989, and ABI00010-ABE9073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                        Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 242654; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 13.4%; Score 9.8; DB 1; Length 13; Best Local Similarity 84.6%; Pred. No. 1.1e+03; Matches 11; Conservative 0; Mismatches 2; Indels
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                                                                                                                                                                              (EPIG-) EPIGENOMICS AG
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABI00010-ABH22073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                          Claim 1; SEQ ID NO 249466; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; cive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
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Best Local Similarity
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99399, ABF00010-ABP99999, ABF00010-ABF99999, ABF99999, ABF00010-ABF999999, ABF00010-ABF999999, ABF900010-ABF999999, ABF900010-ABF999999, ABF900010-ABF999999, ABF900010-ABF999999, ABF900010-ABF999999, ABF900010-ABF999999, ABF900010-ABF999999, ABF900010-ABF999999, ABF900010-ABF9999999, ABF900010-ABF9999999, ABF900010-ABF999999, ABF900010-ABF9999999, ABF900010-ABF9999999, ABF900010-ABF99999999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WFPO at
                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels
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                                                                                                                                                                                     Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0910 approach the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                       Oligonucleotide SEQ ID NO 99140 for detecting SNP TSC0024618.
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84.6%;
                             ABC99123 standard; DNA; 13
                                                                                          (first entry)
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                                                                                                                                                                                                                     domo sapiens.
                                                                                          21-FEB-2002
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                                                           ABC99123;
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RESULT 11
ABC99123/
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0

Local Similarity 84.6 tes 11; Conservative

Query Match

Best Loca Matches

Oligonucleotide SEQ ID NO 25078 for detecting SNP TSC0006091.

· 0

Gaps

.. 0

13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; Live 0; Mismatches 2; Indels

1.8

Set of oligonucleotides, useful for diagnosis and cell typing, addesigned to detect single-nucleotide polymorphisms and cytosine

Berlin K;

Piepenbrock C,

Olek A,

WPI; 2001-657177/75.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Claim 1; SEQ ID NO 49945; 29pp + Sequence Listing; German.

methylation status.

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                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                               Berlin K;
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84.6%;
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3C49928
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at

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Pred. No. 1.1e+03;
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Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

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acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a cange of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9999, ABH00010-ABF9999 and ABI00010-ABF83073 represent the oligomers described in the invention. NoTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide nolymershiems (and) ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 5 C; 0 G; 2 T; 0 U; 0 Other;

.; 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ative 0; Mismatches 2; Indels 945 TGGTTTAATGTAT 957 Conservative 13 regriragegrar 1 Query Match Best Local Similarity qq

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Gaps

ABC50445 standard; DNA; 13 ABC50445/c

BP.

ABC50445;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 50462 for detecting SNP TSC0014180.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713,

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75

uet or oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 50462; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, oratiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99899, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences

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 Length 13;
Score 9.8; DB 1; Length 13
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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   13.4%; Score 9.8;
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ID ABC07560 standard; DNA; 13 BP.
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                     84.68;
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                   Local Similarity
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Query Match
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RESULT 1169

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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels

955 TATCGCTACCAAC 967

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13 rereceraceaac 1

Local Similarity 84.6 Les 11; Conservative

Matches

Query Match

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Homo sapiens.
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                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                      Oligonucleotide SEQ ID NO 9408 for detecting SNP TSC0002484.
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Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels
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                  ABC09417 standard; DNA; 13 BP
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH0010-ABF9989, and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligometorides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABC9989, ABC0010-ABC9989, ABC00010-ABC9989, ABC000010-ABC9989, ABC00010-ABC9989, ABC00010-ABC9989, ABC00010-ABC9989, ABC000010-ABC9989, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention describes novel oligonucleotide primers or peptide nucleic
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                                                                                                                                                        ligonucleotides, useful for diagnosis and cell to detect single-nucleotide polymorphisms and
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                                                  WPI; 2001-657177/75.
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Length 13;
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13.4%; Score 9.8; DB 1; Le
84.6%; Pred. No. 1.1e+03;
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Gaps

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ABC63520 standard; DNA; 13 RESULT

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21-FEB-2002 (first entry)
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Oligonucleotide SEQ ID NO 63537 for detecting SNP TSC0016784.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Berlin K; Piepenbrock C, olek A,

WPI; 2001-657177/75.

set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting call type differentiation. ABC0010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPD at

Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03;

13.4**%**; 84.6**%**;

Query Match Best Local Similarity

Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 U; 0 Other;

ftp.wipo.int/pub/published_pct_sequences

Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine

methylation status

Claim 1; SEQ ID NO 64004; 29pp + Sequence Listing; German.

Claim 1; SEQ ID NO 63537; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a

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 range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
range of diseases including immune system,
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Matches

ABC64467;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (FNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                      Oligonucleotide SEQ ID NO 40115 for detecting SNP TSC0012202
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                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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ses 11; Conserv
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Gaps

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ABC40098

SULT 1175

3C40098/c

Query Match

Best Loc Matches

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Olek A, Piepenbrock C,
                                                               Query Match
Best Local Similarity
                                                                                                                 WO200177384-A2.
                                                                                                             Homo sapiens.
                                                                                                                     18-OCT-2001
                                                                                         ABF40337;
                                                                                 RESULT 1177
                                                                   Matches
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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine

Berlin K;

WPI; 2001-657177/75.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, oligomers are also used for detecting cell type differentiation. ABC0010 +ABC9989, ABF0010-ABF9989, ABF0010-ABF9989, ABF0010-ABF9989, and ABI00110-ABF9013 represent the oligomers described in the invention. NOTE: The sequence data for this patent din ot form part of the printed specification, but
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligonucleotide SEQ ID NO 140337 for detecting SNP TSC0035176.
                                             Claim 1; SEQ ID NO 140334; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; Live 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                          ftp.wipo.int/pub/published_pct_sequences
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methylation status
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This invention describes novel oligonucleotide primers or peptide nucleic acid (RNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 -ABC99899, ABF00010-ABH99999 and ABI000110-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
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            06-APR-2001; 2001WO-IB000713.
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ABF69855 standard; DNA; 13

ABF69855,

(first entry)

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ABF69855;

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF99989, ABF00010-ABF99989 and ABL00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence date for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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84.6%; Pred. No. 1.1e+03;
tive 0; Mismatches 2; Indels
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                                                                                                                                   Sequence 13 BP; 2 A; 1 C; 3 G; 7 T; 0 U; 0 Other;
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                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                             Oligonucleotide SEQ ID NO 169852 for detecting SNP TSC0042415.
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acid (PNA) oligomers for detecting single muclecide polymorphisms (SNP) and cycosine methylation status in chemically pretreated genomic DNA. The coligomuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9969, ABP0010-ABF99999 and ABL00010-ABF99999, represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                               This invention describes novel oligonucleotide primers or peptide nucleic
acid; cytosine methylation; cardiovascular; primer; ss; system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Best Local Similarity 84.6'
Marches 11; Conservative
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 peptide nucleic
                central nervous
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                                                 sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                             Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                              Claim 1; SEQ ID NO 199126; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 228957; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 13;
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84.6%; Pred. No. 1.18+03;
ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;
                                   Berlin K;
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                               Olek A, Piepenbrock C,
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(EPIG-) EPIGENOMICS AG.
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                                                                 WPI; 2001-657177/75.
                                                                                                                               methylation status.
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ABH28980/c
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Gaps

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Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03; 0; Mismatches 2; Indels

0; Mismatches

BP.

This invention describes novel oligonucleotide primers or peptide nucleic

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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory. central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 ABC99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989, and ABL00010-ABF99993 and ABL00010-ABF99993 represent the oligomers described in the invention. NOTE: The sequence date for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Best Local Similarity
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Oligonucleotide SEQ ID NO 182319 for detecting SNP TSC0045058. BP. ABF82322 standard; DNA; 13 (first entry) 22-FEB-2002 ABF82322; 3SULT 1184

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C,

Berlin K;

WPI; 2001-657177/75.

set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 182319; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99999, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03; 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              was obtained in electronic format from Wl
ftp.wipo.int/pub/published_pct_sequences
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84.6%;
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   13.4%;
84.6%;
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                                     11; Conservative
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   Query Match
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This invention describes novel oligonuclectide primers or peptide nucleic acid (RNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a renge of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC09010 appresent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                  Oligonucleotide SEQ ID NO 243525 for detecting SNP TSC0059413.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 243525; 29pp + Sequence Listing; German.
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Matches 11, Conservative
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                   ABH43548;
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Berlin K;

Piepenbrock C,

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PMA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, coligomers are also used for detecting cell type differentiation. ABC0010 aABC99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF80013 data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pot_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                       06-APR-2001; 2001WO-IB000713.
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                                                                                                              (EPIG-) EPIGENOMICS AG
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Gaps

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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.10+03; cive 0; Mismatches 2; Indels

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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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Claim 1; SEQ ID NO 93219; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 ABC99989, ABC0010-ABC99989, ABC0010-ABC99989, ABC0010-ABC99989, and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 4 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Ouery Match
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps

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> 928 TTATCCCTCTCT 940 |||||||||||| 13 TTATCCCGCCCT 1

SULT 1189

3C93918 3 ABC93918 standard; DNA; 13 BP.

ABC93918;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 93935 for detecting SNP TSC0023471.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001.

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 93935; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

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oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; 88; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 97293 for detecting SNP TSC0024130.

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF0010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligoners for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligoners are also used for detecting cell type differentiation. ABC0010-ABE99989, ABF00010-ABE99889, ABH0010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from NIPO at
                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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ABC97276 standard; DNA; 13

RESULT 1192 ABC97276/c

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21-FEB-2002 (first entry)

ABC97276;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                     This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                 Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03; 0; Mismatches 2; Indels
Claim 1; SEQ ID NO 76550; 29pp + Sequence Listing; German.
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84.6%;
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Best Local Similarity 84.6
Matches 11; Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               uet or origonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                              Oligonucleotide SEQ ID NO 7400 for detecting SNP TSC0002151.
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                                                    ABC07409 standard; DNA; 13 BP.
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            RESULT 1197
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                                                                                         13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.18+03; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 31883; 29pp + Sequence Listing; German.
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                                                Sequence 13 BP; 3 A; 5 C; 0 G; 5 T; 0 U; 0 Other;
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Best Local Similarity 84.0.
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Matches 11; Conservative
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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                   Claim 1; SEQ ID NO 84516; 29pp + Sequence Listing; German
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Piepenbrock C,
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Best Local Similarity
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nes 11; Conservative
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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABM00010-ABH99989 and ABI00100-ABI82073 data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine metrylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC09019 -ABC99989, ABF0010-ABF9989, ABH0010-ABH99989 and ABI0010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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oligonuclectides are used for diagnosis and/or prognosis of cancer and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                 Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 39008; 29pp + Sequence Listing; German.
                                                                                                                                                                             Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;
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ID ABC38991 standard; DNA; 13 BP.
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84.6%;
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Best Local Similarity 84.00,
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                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Pred. No. 1.18+03;
0; Mismatches 2; Indels
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                   Indels
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84.6%; Pred. No. 1.1e+03;
ive 0; Mismatches 2;
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                                             905 TCATTTTTGG 917
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                  11; Conservative
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 Best Local Similarity
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ABF69854
ID ABF69854
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AC ABF69854
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              Matches
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ABF69854;

13.4%; Score 9.8; DB 1; Length 13;

Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;

Query Match

22-FEB-2002

Homo sapiens.

18-OCT-2001

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and merabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABE9989, ABF00010-ABE9989, ABF00010-ABE9989, and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but typ.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; Ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                          Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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84.6%;
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Best Local Similarity 84.6'
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                   Oligonucleotide SEQ ID NO 169851 for detecting SNP TSC0042415
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Homo sapiens

22-FEB-2002

ABF62879;

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3SULT 1204

Query Match

Best Loca Matches

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Gaps

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to detect single-nucleotide polymorphisms and cytosine
                         methylation status
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German Claim 1; SEQ ID NO 164968; 29pp + Sequence Listing; This invention describes novel oligonucleotide primers or peptide nucleicacid (PNA) oligomers for detecting angle nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The coligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 4 C; 0 G; 7 T; 0 U; 0 Other;

13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; Live 0; Mismatches 2; Indels 927 ITTAICCCICCIC 939 Local Similarity 84.6 1es 11; Conservative Query Match Matches ॅ

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Gaps

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TTTATTCCTACTC 13

RESULT 1206 ABH15748

ABH15748 standard; DNA; 13 BP

ABH15748;

(first entry) 22-FEB-2002

Oligonucleotide SEQ ID NO 215725 for detecting SNP TSC0052470.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 215725; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleicacid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF8073

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 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                          Length 13;
                                                                                                                 2; Indels
                                                            Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
                                                                                      Score 9.8; DB 1;
Pred. No. 1.1e+03;
0; Mismatches 2;
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84.6%;
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Matches 11; Conservative
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.; 0 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels Sequence 13 BP; 1 A; 1 C; 3 G; 8 T; 0 U; 0 Other; 11; Conservative Local Similarity Query Match Best Loca Matches

ftp.wipo.int/pub/published_pct_sequences

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Gaps

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

909 TTTCTTTGGTCTT 921

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22-FEB-2002

ABF67029

18-OCT-2001

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABMF00010-ABH99989 and ABH00010-ABH9989 and ABH00010-ABH99989, and ABH00010-ABH99980, abecome data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                   set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 246397; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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Best Local Similarity
Matches 11; Conserv
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22-FEB-2002

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ABC93198;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ô Gaps Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status. 6 Claim 1; SEQ ID NO 246766; 29pp + Sequence Listing; German. 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels Sequence 13 BP; 3 A; 3 C; 0 G; 7 T; 0 U; 0 Other; ftp.wipo.int/pub/published_pct_sequences Berlin K; CTTTGCCTTTTAT 931 CTTTACCTTATAT 13 Conservative Piepenbrock C, (EPIG-) EPIGENOMICS AG. WPI; 2001-657177/75 Similarity 11; 919 olek A, Local

ABC93198 standard; DNA; 13 BP Query Match RESULT 1211 Matches

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide SEQ ID NO 93215 for detecting SNP TSC0023294. (first entry) Homo sapiens. 21-FEB-2002

WO200177384-A2.

06-APR-2001; 2001WO-IB000713. 18-OCT-2001.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C,

Berlin K;

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status. WPI; 2001-657177/75.

Claim 1; SEQ ID NO 93215; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABE9989, ABF00010-ABE99989, ABF00010-ABE99898, ABF00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99898, ABF00010-ABE99989, ABF00010-ABE99898, ABF00010-ABE99989, ABF00010-ABE999898, ABF00010-ABE99989, ABF0001 ö SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Gaps ; 0 Oligonucleotide SEQ ID NO 19433 for detecting SNP TSC0004044. 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; Live 0; Mismatches 2; Indels Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other; ftp.wipo.int/pub/published_pct_sequences ABC19416 standard; DNA; 13 BP. 928 TTATCCCTCTCT 940 (first entry) Vuca, West Local Similarie, Matches 11; Conservative 13 Trarcccaccci 1 20-FEB-2002 Homo sapiens ABC19416; RESULT 1212 ABC19416 g 8

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine WPI; 2001-657177/75 methylation status.

Berlin K;

Olek A, Piepenbrock C, (EPIG-) EPIGENOMICS AG.

06-APR-2001; 2001WO-IB000713 07-APR-2000; 2000DE-01019173

WO200177384-A2.

18-OCT-2001.

Claim 1; SEQ ID NO 19433; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PRA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation ABC0010 ABC99989, ABF00010-ABF99989, and holioone-ABIG2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but fitp.wipo.int/pub/published_pct_sequences

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; Ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                   Oligonucleotide SEQ ID NO 70878 for detecting SNP TSC0018401.
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ABC70861 standard; DNA; 13 BP.
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                                                                                         .;
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                                           ch 13.4%; Score 9.8; DB 1; Length 13; 1 Similarity 84.6%; Pred. No. 1.18+03; 11; Conservative 0; Mismatches 2; Indels
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        Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                  ABC20175 standard; DNA; 13 BP
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Best Local
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Berlin K;

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                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oligonucleotide SEQ ID NO 73549 for detecting SNP TSC0018945.
                                                                                                            13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels
                                                       Sequence 13 BP; 10 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
ftp.wipo.int/pub/published_pct_sequences
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11; Conservative
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ESULT 1214 BC70861/c

Berlin K;

Piepenbrock C,

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designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                             Claim 1; SEQ ID NO 73549; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                              Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
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                                     06-APR-2001; 2001WO-IB000713,
                                                    07-APR-2000; 2000DE-01019173
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                                                                                                                 Set of oligonucleotides,
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                                                                  (EPIG-) EPIGENOMICS AG
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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and oytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF0010-ABR99899, ABH0010-ABR9989 and ABI0010-ABR9989 and ABI0010-ABR9989 and ABI0010-ABR9989 and ABI0010-ABR9989 and ABI0010-ABR9989 was obtained in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                       This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide nolymorphisms (pun)
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                                           Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                      Claim 1; SEQ ID NO 73550; 29pp + Sequence Listing; German.
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WPI; 2001-657177/75.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 represent the oligomers described in the invention. NoTE: The sequence data for this patent did not form part of the printed specification, but the content of the printed specification, but the content of the printed specification, but
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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels

TCATTTTTTGG 917

905 Н

Conservative

TIATITITIGG 13

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Berlin K;

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Sequence 13 BP; 11 A; 2 C; 0 G; 0 T; 0 U; 0 Other;

. 0 Gaps 0; 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels Matches 11; Conservative Best Local Similarity Query Match

ABF00942 standard; DNA; 13

BP.

ABF00942;

(first entry) 21-FEB-2002 Oligonucleotide SEQ ID NO 100939 for detecting SNP TSC0025123.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Berlin K;

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 100939; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABF00010-ABF99989 and NEI00010-ABI2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

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Sequence 13 BP; 4 A; 0 C; 8 G; 1 T; 0 U; 0 Other;

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Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
      13.4%;
84.6%;
       Query Match
Best Local Similarity 84.6
Matches 11; Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABP00010-ABH99989, and ABI00010-ABH99989, and ABI00010-ABH99989, and ABI00010-ABH9989 and ABI00010-ABH998073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                      Oligonucleotide SEQ ID NO 100940 for detecting SNP TSC0025123.
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84.6%;
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932 CCCTCCTCTTCAT 944
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                              13 cccrccacriccr
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This invention describes novel oligonucleotide primers or peptide nucleicacid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The coligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, oligomers are also used for detecting cell type differentiation. ABC00010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the content of the printed specification, but the content of the printed specification, but
                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                  Oligonucleotide SEQ ID NO 54470 for detecting SNP TSC0014932.
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                                                                                                                             Homo sapiens.
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Berlin K;

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This invention describes novel oligonucleotide primers or peptide nucleicacid (FNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF9989, ABF00010-ABF99899, ABF00010-ABF9989, ABF9989, ABF998, A
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                                                                                                                                                                                                                                                            ligonuclectides, useful for diagnosis and cell typing, it detect single-nuclectide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 31884; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels
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                                                                                                                                                          Berlin K;
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06-APR-2001; 2001WO-IB000713.
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                                                   07-APR-2000; 2000DE-01019173.
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                                                                                                                                                                                                           WPI; 2001-657177/75,
                                                                                                                                                                                                                                                                                                                  methylation status.
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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.16+03; ative 0; Mismatches 2; Indels

11; Conservative

13 rakrrgarrrakr 1

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

WO200177384-A2

18-OCT-2001.

Homo sapiens.

Oligonucleotide SEQ ID NO 31884 for detecting SNP TSC0009927.

BP

ABC31867 standard; DNA; 13

ABC31867,

20-FEB-2002 (first entry)

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acid (PNA) oligomers for detecting single muclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomuclocides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABC00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                              novel oligonuclectide primers or peptide nucleic
Claim 1; SEQ ID NO 7548; 29pp + Sequence Listing; German.
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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels Sequence 13 BP; 4 A; 5 C; 1 G; 3 T; 0 U; 0 Other; 955 TATCGCTACCAAC 967 11; Conservative Local Similarity Query Match Matches

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Gaps

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rcrederacaade 13

ABC59211 standard; DNA; 13 C59211/

BP.

(first entry) 21-FEB-2002 ABC59211;

Oligonucleotide SEQ ID NO 59228 for detecting SNP TSC0015869.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin Olek A, Piepenbrock C,

WPI; 2001-657177/75

. 7. Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 59228; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a renge of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

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                                                    Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03; 0; Mismatches 2; Indels
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                              Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                  Local Similarity 84.6%;
les 11; Conservative
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Best Local Similarity
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                                                          Query Match
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(EPIG-) EPIGENOMICS AG.
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                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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cytosine
                                                                                      Oligonucleotide SEQ ID NO 127946 for detecting SNP TSC0032026.
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                                                                                                                                                                                                                                                                                      Berlin
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                       ABF27949 standard; DNA; 13
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                                                                                                                                                                                                                                                                                                                                                     methylation status
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Matches 11
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BF27949
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligoners for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF9989, ABF00010-ABF9989, abf00010-ABF9989, ABF00010-ABF9989, and ABF00010-ABF9989, are represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at
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central nervous system; gastrointestinal; respiratory; immune; metabolic.
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tes 11; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP, single nucleotide polymorphism, human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                             tides, useful for diagnosis and cell typing, is single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 196256; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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Berlin K;
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84.68;
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Best Local Similarity 84.6
Matches 11; Conservative
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gned to detect single
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Piepenbrock
                                                          WPI; 2001-657177/75
                                                                                                                                                                                       methylation status.
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   olek A,
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

Claim 1; SEQ ID NO 221377; 29pp + Sequence Listing; German.

Set of oligonucleotides, useful for diagnosis and cell typing, addesigned to detect single-nucleotide polymorphisms and cytosine

Berlin K;

Piepenbrock C,

olek A,

WPI; 2001-657177/75.

methylation status

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at
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and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABF00010-ABF89898, ABF00010-ABF89898 and ABI00010-ABF82073 represent the oligomers described in the invention. NoTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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84.6%;
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Best Local Similarity 84.6'
Matches 11; Conservative
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173

WO200177384-A2.

18-OCT-2001.

Homo sapiens.

(EPIG-) EPIGENOMICS

Oligonucleotide SEQ ID NO 181685 for detecting SNP TSC0044924.

(first entry)

22-FEB-2002

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ABF81688

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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 Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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Matches 11; Conserv
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Query Match
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and range of diseases including immune system, gastrointestinal, respiratory, coligomers are also used for detecting cell type differentiation. ABC0010 aABC99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF82073 and actabolic dispersent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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ABF81688 standard; DNA; 13 BP.

RESULT 1231 ABF81688,

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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; 1ve 0; Mismatches 2; Indels

918 TCTTTGCCTTTTA 930

Query Match 13.4 Best Local Similarity 84.6 Matches 11; Conservative

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WO200177384-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for disponsis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010
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Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                           Claim 1; SEQ ID NO 157601; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                               13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; Live 0; Mismatches 2; Indels
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) eligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The eligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The eligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABF99989, and ABF00010-ABF99989, and ABF00010-ABF99989, and ABF00010-ABF99989 and ABF00010-ABF9073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at
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                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                Oligonucleotide SEQ ID NO 161758 for detecting SNP TSC0040719.
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                                  ABF61761 standard; DNA; 13
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RESULT 1236
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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; rive 0: Mismatches 2; Indels

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This invention describes novel oligonucleotide primers or peptide nucleic acid (FNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 191288; 29pp + Sequence Listing; German.
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                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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·, This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 appresent the oligomers described in the invention. NOTE: The sequence the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences Gaps ., 0 Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03; 0; Mismatches 2; Indels Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other; 13.4%; 84.6%; 11; Conservative Query Match Best Local Similarity Matches

ABH43380 standard; DNA; 13 RESULT 1240

ABH43380;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 243357 for detecting SNP TSC0059367.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173,

(EPIG-) EPIGENOMICS AG

Berlin K; Piepenbrock C, Olek A,

WPI; 2001-657177/75

set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 243357; 29pp + Sequence Listing; German.

acid (FNA) oligomers for detecting single nucleotide polymorphisms for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomorleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABR00010-ABE99989, ABR00010-ABE99989, ABR00010-ABE99989, ABR00010-ABE99989 and ABIO010-ABE82073 data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide nolymorphisms (cms)

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                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Score 9.8; DB 1; Length 13
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13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; ive 0; Mismatches 2; Indels

ABC95909;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABH22073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                               Oligonucleotide SEQ ID NO 95926 for detecting SNP TSC0023860.
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC09989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-ABIS2073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic formart from WIPO at
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                                                                                                                                Claim 1; SEQ ID NO 106597; 29pp + Sequence Listing; German.
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Matches 11; Conservative
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ABC32799 standard; DNA; 13 BP. 20-FEB-2002 (first entry) ABC32799; RESULT 1245 ABC32799

Oligonucleotide SEQ ID NO 32816 for detecting SNP TSC0010303.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 32816; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a

Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03;

13.4%; 84.6%;

Query Match Best Local Similarity

Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;

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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC09989, ABF00010-ABP9989, aBF00010-ABF9989, and ABI0010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Best Local Similarity
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ABC38990 standard; DNA; 13 BP.

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                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 39007 for detecting SNP TSC0011996
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Berlin K;

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 Tepresent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPD at This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically precreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status. Oligonucleotide SEQ ID NO 129008 for detecting SNP TSC0032298. Claim 1; SEQ ID NO 115148; 29pp + Sequence Listing; German. 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; Claim 1; SEQ ID NO 129008; 29pp + Sequence Listing; German. Sequence 13 BP; 1 A; 4 C; 0 G; 8 T; 0 U; 0 Other; 84.6%; Pred. M. ... ftp.wipo.int/pub/published_pct_sequences Berlin K; ABF29011 standard; DNA; 13 BP. 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173. 919 CTTTGCCTTTTAT 931 (first entry) 1 Crrrrcccrrrar 13 Local Similarity 84.6 les 11; Conservative Piepenbrock C, (EPIG-) EPIGENOMICS AG WPI; 2001-657177/75. methylation status. WO200177384-A2. Homo sapiens. 21-FEB-2002 18-OCT-2001. ABF29011: Query Match Olek A, Matches RESULT 1251 ABF29011 à Db This invention describes novel oligonuclectide primers or peptide nucleic acid (RNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0910 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but fitp.wipo.int/pub/published_pct_sequences ·. SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Gaps Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status. ; 0 Oligonucleotide SEQ ID NO 115148 for detecting SNP TSC0028845. Claim 1; SEQ ID NO 115147; 29pp + Sequence Listing; German. 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels Sequence 13 BP; 8 A; 0 C; 4 G; 1 T; 0 U; 0 Other; Berlin K; 06-APR-2001; 2001WO-IB000713. ABF15151 standard; DNA; 13 BP. 07-APR-2000; 2000DE-01019173 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173 919 CTTTGCCTTTTAT 931 21-FEB-2002 (first entry) Query Match
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PRA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory. central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABH99999 and ABI00010-ABIS2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 153568; 29pp + Sequence Listing; German.
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Pred. No. 1.1e+03;
0; Mismatches 2; Indels
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                                                              Berlin K;
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84.6%;
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Matches 11; Conservative
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                                                        Olek A, Piepenbrock C,
(EPIG-) EPIGENOMICS AG.
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                                                                                                              WPI; 2001-657177/75
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABM00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence date for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABIO010-ABIS2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at first of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; SS; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Length 13,
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Score 9.8; DB 1;
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ABH37737/c
ID ABH37737 standard; DNA; 13
   13.4%;
84.6%;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cligomers are also used for detecting cell type differentiation. ABC00010 abC99389, ABF00010-ABB19989 and ABI00010-ABB182073 represent the oligomers described in the invention. NoTE: The sequence was obtained in electronic form part of the printed specification, but
                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                         set or oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                              Oligonucleotide SEQ ID NO 237714 for detecting SNP TSC0057979.
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                                                                                                                                                                                                                                                                                                                                              (EPIG-) EPIGENOMICS AG
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               ABH37737;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (RNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretraated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, entral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC09089, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABB2073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at

Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine

methylation status.

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Olek A, Piepenbrock C, (EPIG-) EPIGENOMICS AG.

WPI; 2001-657177/75.

06-APR-2001; 2001WO-IB000713.

WO200177384-A2

18-OCT-2001

07-APR-2000; 2000DE-01019173

Claim 1; SEQ ID NO 187616; 29pp + Sequence Listing; German.

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Gaps

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Length 13; 2; Indels

13.4%; Score 9.8; DB 1; 84.6%; Pred. No. 1.1e+03; 0; Mismatches

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13 TTGATTAGTTTAA 1

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Matches

Local Similarity

Query Match

BP.

(first entry)

22-FEB-2002

ABF65507;

507/c ABF65507 standard; DNA; 13

RESULT 1261

ABF65507,

Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

. 0 Gaps ·; 13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.1e+03; tive 0; Mismatches 2; Indels 2; Indels Local Similarity 84.6 Query Match

947 GTTTAATGTATCG 959 GriraArcirirg 1 13 Best Loca Matches Š

ABF87619 standard; DNA; 13 BP (first entry) 22-FEB-2002 ABF87619 ABF87619

RESULT 1260

Oligonucleotide SEQ ID NO 187616 for detecting SNP ISC0007370.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide SEQ ID NO 165504 for detecting SNP TSC0041502. Berlin K; 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173 Piepenbrock C, (EPIG-) EPIGENOMICS AG WPI; 2001-657177/75 WO200177384-A2 Homo sapiens 18-OCT-2001. olek A,

AXX AXX BE XXX BY XX BY XX

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Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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German, Claim 1; SEQ ID NO 165504; 29pp + Sequence Listing; This invention describes novel oligomucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABP0010-ABF99989, ABH00010-ABF99989, ABH00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence date for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 6 A; 4 C; 1 G; 2 T; 0 U; 0 Other;

ö Gaps 0; Match 13.4%; Score 9.8; DB 1; Length 13; Local Similarity 84.6%; Pred. No. 1.1e+03; les 11; Conservative 0; Mismatches 2; Indels Query Match Best Loc Matches

ABH43381 standard; DNA; 13 22-FEB-2002 (first entry) ABH43381; ESULT 1262 BH43381/

BP

Oligonucleotide SEQ ID NO 243358 for detecting SNP TSC0059367.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Berlin K; Piepenbrock C, olek A,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine Claim 1; SEQ ID NO 243358; 29pp + Sequence Listing; German. methylation status.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

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oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide SEQ ID NO 246765 for detecting SNP TSC0060313.
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                                                                                                                                                                   Score 9.8; DB 1; Length 13; Pred. No. 1.1e+03;
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84.6%; Pred. No. 1.1e+03;
tive 0; Mismatches 2; Indels
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                                                                                                                                 Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;
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ftp.wipo.int/pub/published_pct_sequences
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84.68;
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ses 11; Conservative
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Matches 11; Conserv
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RESULT 1266
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                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                  Oligonucleotide SEQ ID NO 248111 for detecting SNP TSC0060637.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 248111; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13.4%; Score 9.8; DB 1; Length 13; 84.6%; Pred. No. 1.16+03; tive 0; Mismatches 2; Indels
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                                                                               ABH48134 standard; DNA; 13 BP
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  CTTTGCCTTTTAT 931
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                     CTTTACCTTATAL
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This invention describes novel oligomucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a renage of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 aPBC99989, ABF00010-ABH99989 and ABI00010-ABH20073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pot_sequences
                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 256606 for detecting SNP TSC0009817.
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Best Local Similarity 84.6
Matches 11, Conservative
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Claim 1; SEQ ID NO 266282; 29pp + Sequence Listing; German.
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84.6%;
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                         Claim 1; SEQ ID NO 258450; 29pp + Sequence Listing; German.
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                                                                                            Olek A, Piepenbrock C,
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The present invention describes a method for transforming a plastid using conterial recombinase A (recA), and thereby increasing efficiency of bacterial recombination to decrease the selection frequency for the homologous recombination to decrease the selection frequency for the preparation of homoplasmy. The method for transforming the plastid using recA comprises: (a) preparing a recA expression vector for transforming containing the recA gene and plastid targeting sequence; (b) transforming a plant with the recA expression vector to prepare a first nuclei transformed plant; (c) preparing a vector for transforming containing at least one desired gene and a selection arker gene; and (d) transforming plastid produced by the first nuclei transformed plant with the vector for transformed plant with the vector for transforming plastid containing at least one desired gene and a selection correspondence by prepare a second transformed plant, in which the selection marker is 168 tibosome subunit having tolerance to spectinomycin or streptomycin, or enzyme such
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNF) and ortosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI0010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Transforming plastid using bacterial recombinase a(reca).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (KORE-) KOREA RES INST BIOSCIENCE & BIOTECHNOLOG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Green fluorescent protein related PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Yoo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Min SR,
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inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptes end/or HBV reverse transcriptese primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and disease states related to HBV and for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HBV enzymatic nucleic acid sequences disclosed in the present invention

88888888888888888888

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Gaps

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Score 9.8; DB 1; Length 13; Pred. No. 1.18+03; 6; Mismatches 2; Indels

h 13.4%; Similarity 38.5%; 5; Conservative

Query Match Best Local Similarity Matches 5; Conserv

917 GTCTTTGCCTTTT 929

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Sequence 13 BP; 0 A; 4 C; 3 G; 0 T; 6 U; 0 Other;

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ö
as cytosine deaminase and HADH and/or GFP (green fluorescence protein). The present sequence represents a PCR primer for GFP which is used in the
                                                                                                                                                                                                                                                                                 Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lee
                                                                                               0
                                                                    Score 9.8; DB 1; Length 13;
Pred. No. 1.1e+03;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pavco P,
                                                                                                                                                                                                                                                             HBV enzymatic nucleic acid substrate sequence #186.
                                             Sequence 13 BP; 6 A; 1 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mcswiggen J, Morrissey D,
                         exemplification of the present invention
                                                                                                                                                                                              BP.
                                                                      13.4%;
84.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAR-2002; 2002WO-US009187.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-JUN-2001; 2001US-00877478.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-03330559P.
05-DEC-2001; 2001US-03370559P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAR-2001; 2001US-00817879.
                                                                                                                  938
                                                                                                                                                                                            ACD56505 standard; RNA; 13
                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RIBOZYME PHARM INC
                                                                                Best Local Similarity 84.6
Matches 11; Conservative
                                                                                                                                     13 rGrraraccrccr 1
                                                                                                                 926 TTTTATCCCTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Macejak D,
Roberts E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                       Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LEE P.
DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ROBERTS E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAVCO P.
                                                                                                                                                                                                                                                                                                                                                                                                              WO200281494-A1.
                                                                                                                                                                                                                                         24-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                    17-0CT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Blatt L, mr
                                                                                                                                                                                                                  ACD56505:
                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (DRAP/)
(ROBE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (PAVC/)
(LEEP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MACE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BLAT/)
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888888
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The antisense oligonucleotides are useful in the treatment of tumours in which expression of TGF-beta is of relevance for pathogenicity and/or inhibition of pathological angiogenesis. They are used especially for the treatment of the immunosuppressive effect of TGF-beta, augmentation of the proliferation of rytotoxic lymphocytes, treatment of endogenous the proliferation of TGF-beta, treatment of breast tumours, neurofibromas and malignant gliomas, including glioblastomas, treatment and prophylaxis of skin carcinogenesis, and treatment of oesophageal and gastric carcinomas. See AAQ78352-Q78488. The sequences given in GENESEQ files
                                                                                                                                                                                                                               Transforming growth factor beta; TGF-beta; antisense; treatment; tumour; argiogenesis; breast tumour; neurofibroma; glioma; glioblastoma; carcinogenesis; carcinoma; oscophagus; oesophageal; gastric; gut; immunosuppression; oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Schlingensiepen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New transforming growth factor beta anti:sense oligo:nucleotide(s) treating immunosuppression, tumours, etc.
                                                                                                                                                                                               Antisense oligonucleotide hybridising to TGF-beta gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Brysch W, Schlingensiepen K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 6; Page 32; 74pp; English.
                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                             94WO-EP001362.
                                                                                                                                                                                                                                                                                                                                                                                                                                             93EP-00107089.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              93EP-00107849,
                                                                               AAQ78380 standard; DNA; 14
                                                                                                                                                                  (first entry)
1 GUCUGUGCCUUCU 13
                                                                                                                                                 (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1994-358266/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Schlingensiepen G,
                                                                                                                                                                                                                                                                                                                                             WO9425588-A2.
                                                                                                                                                                                                                                                                                                                                                                                                            29-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                            30-APR-1993;
                                                                                                                                               25-MAR-2003
27-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                             10-NOV-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bogdahn U;
                                                                                                                 AAQ78380;
                                                 1270
                                                                  AAQ78380
                                                 RESULT
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The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,

Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus

WPI; 2003-229207/22.

Example 1; Page 221; 387pp; English.

cleaving or -binding agents. The process for preparing oligonucleotide 3',5'-diphosphates is simple and sultable for use in automatic DNA synthesisers. This sequence represents a fragment of the HIV-1 provirus genome, used to describe the method of the invention. (Updated on 16-OCT-2003 to standardise OS field)

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Gaps

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2; Indels

Length 14;

Score 9.8; DB 1; Pred. No. 1.2e+03;

0; Mismatches

11; Conservative 919 CTTTGCCTTTTAT

Matches

8

Local Similarity

Query Match

888888888

931

Sequence 14 BP; 10 A; 0 C; 4 G; 0 T; 0 U; 0 Other;

13.4%; 84.68;

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This invention describes novel derivatised solid supports of formula S'-L -CH2CH2-R, where: S' = a solid support; L = a bond or an (in) organic linker; Z = SO2 or S-S; R = OH, an H-phosphonate, alkanephosphonate, phosphortiester, phosphore aleaster, phosphore aleaster, phosphore or phosphore aleaster, phosphore aleaster, phosphore aleaster, phosphore an optionally substituted or modified nucleotide (N') or an optionally substituted or phosphorate, phosphorate, phosphorate, phosphorater, phosphoramidate or phosphoramidate, phosphoramidate or phosphoramidate group, OH, ORI, ORI, SRI or optocation of the compounds of formula optocation of the compounds of formula optocation of the compound of the compoundate or phosphoramidate, or proparing an oligonucleotide 3'-phosphate, a process for preparing an oligonucleotide 3'-phosphate, The phosphate, The chosphates may be used to prepare DNA-targeting conjugates, e.g. with anticancer drugs or viral (e.g. HIV) DNA-targeting and oligonucleotide of the prepare of the phosphore or drugs or viral (e.g. HIV) DNA-targeting conjugates, e.g. with anticancer drugs or viral (e.g. HIV) DNA-targeting and all the phosphore or drugs or viral (e.g. HIV) DNA-targeting or process for phosphates may be used to prepare DNA-targeting or viral (e.g. HIV) DNA-targeting and all the process for phosphates 
                                                                                                                                                                                                                                                                                                                                                                                                     ö
AAQ78352-Q78407 and AAQ78488 are antisense oligodeoxynucleotides of TGF-beta 1. The sequences given in GENESEQ files AAQ78408-78487 are antisense oligodeoxynucleotides of TGF-beta 2 in the form of phosphorothioate analogues. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Derivatised solid supports and reagents for oligo:nucleotide synthesis and new oligo:nucleotide phosphoramidate conjugates.
                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA-targeting conjugate; anticancer drug; viral DNA-cleaving agent; viral DNA-binding agent; solid support; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                     ·
0
                                                                                                                                                                                                                                                                                                      Score 9.8; DB 1; Length 14; Pred. No. 1.2e+03; 0; Mismatches 2; Indels
                                                                                                                                                                                                                             Seguence 14 BP; 1 A; 4 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CANCER RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 43; 68pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HIV-1 proviral DNA fragment 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAXS6923 standard; DNA; 14 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Weil R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SLOAN KETTERING INST
ZW BIOMEDICAL RES AG.
                                                                                                                                                                                                                                                                                                               13.4%;
84.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               928 TTATCCTCTCT 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Trarccircicis 14
                                                                                                                                                                                                                                                                                                                        Query Match 13.4
Best Local Similarity 84.6
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (revised)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1996-010846/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (SLOK ) SLOAN
(ZWBI-) ZW BIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Watanabe KA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9531434-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-OCT-2003
15-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX56923;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligomucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligomucleotide specific for the human ILS receptor. The method can be used to treat airway disease, bronchitis and other airway disease, bronchitis and other airway diseases, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyper-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of
                                                                                                                                                                                           Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 9.8; DB 1; Length 14
Pred. No. 1.2e+03;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 14 BP; 0 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                 Human ILS receptor antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 5; Page 31; 71pp; English.
                                                                           AAT76230 standard; DNA; 14 BP.
                                                                                                                                                                                                                                                                                                                                                                    95US-00474497.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13.4%;
                                                                                                                                                                                                                                                                                                                                         96WO-US009306.
                                                                                                                                                                                                                                                                                                                                                                                                    (UYEC-) UNIV EAST CAROLINA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 Trecriridarin 13
                                                                                                                                       (first entry)
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13 Crrrrccrrrrr
                                                                                                                                                                                                                                                                                                                                                                                                                                  Metzger WJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1997-051871/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             reactive airways
                                                                                                                                                                                                                                                                                                                                         06-JUN-1996;
                                                                                                                                                                                                                                                                              WO9640162-A1
                                                                                                                                                                                                                                                                                                                                                                      07-JUN-1995;
                                                                                                                                       12-SEP-1997
                                                                                                                                                                                                                                                                                                            19-DEC-1996.
                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Nyce JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                         AAT76230;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
                                               RESULT
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AAX54026;

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Preparation of antisense oligo:nucleotide(s) which lack long runs of consecutive guanosine or inosine - and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapeutically or to modulate growth of cells in
                                                                                   gene; antisense oligonucleotide; modulate; gene expression; ss.
                                                                                                                                                                                                  (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
                                                                   rb gene antisense oligonucleotide rb-N-110.
                                                                                                                                                                                                                                                                                                         Example 7; Fig 9c; 286pp; English.
                AAV49162 standard; DNA; 14 BP.
                                                                                                                                                                                                                   Schlingensiepen K, Brysch W;
                                                                                                                                                                  97EP-00101531
                                                                                                                                                                                  97EP-00101531
                                                  (first entry)
                                                                                                                                                                                                                                    WPI; 1998-400910/35.
                                                                                                                Homo sapiens
                                                                                                                                                                 31-JAN-1997;
                                                                                                                                                                                 31-JAN-1997;
                                                 15-0CT-1998
                                                                                                                              EP856579-A1
                                                                                                                                                05-AUG-1998
                                                                                                      Synthetic
                                 AAV49162;
                                                                                                                                                                                                                                                                                        culture,
RESULT 1273
        AAV49162,
                                                                                     ų,
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AAV49008-236 represent antisense oligomucleotides directed against the rb gene. Of these, only oligomucleotides AAV49008-52 resulted in effective downregulation of negative growth control by th, while oligomucleotides acamplify the AAV49052-236 had little effect. The oligomucleotides exemplify the invention. The specification describes oligomucleotides that contain 8-30 mucleotides that can each form three hydrogen bonds to cytosine; do not contain four consecutive nucleotides able to form three H-bonds each to four consecutive cytosines; do not contain two sequences of three consecutive nucleotides ach able to form the H-bonds each to four consecutive cytosines; do not three H-bonds to three consecutive cytosines, and the ratio between cristiques able to form two H-bonds each (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The oligomucleotides are used to modulate expression of genes, particularly the genes for p53, ErB-2, junb, junb, (e.g. bore marrow stem, liver or kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The oligomucleotides can also be used to analyse function of proteins (by altering their expression or activity) and rimmination the immine evet me
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              therapeutically, e.g. in cases
stimulating the immune system
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                                                            Gaps
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                           Score 9.8; DB 1; Length 14;
Pred. No. 1.2e+03;
0; Mismatches 2; Indels
Sequence 14 BP; 9 A; 1 C; 1 G; 3 T; 0 U; 0 Other;
                              13.48;
                                          84.68;
                                                                                 909 TITCTITGGICTE 921
                                                      Conservative
                    Query Match
Best Local Similarity
Matches 11; Conser
                                                                                 ੋ
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Gaps

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909 TITCITIGGICIT 921 rrccrrrdcrcrr 13

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RESULT 1275

11; Conservative

Matches

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TTTATTTGATCTT
14
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AAX54026 standard; DNA; 14 BP. RESULT 1274 AAX54026 ۵

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The specification describes antisense oligonucleotides (AAX52869-X55271)

directed against at least 2 mRNAs selected from target genes, coding and
non-coding regions of RNAs corresponding to target genes, coding and
codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
end and the juxta-section between coding and non-coding regions and all
segments of RNAs encoding proteins associated with one or more diseases,
conditions or mixtures. The antisense oligonucleotides may be derived
from sequences AAX55272-74. These multiple target oligonucleotides
(specifically AXX55180-271) can be used for the antisense treatment of
diseases and conditions. Typical diseases and conditions are those
conditions associated with impaired respiration and inflammation, including lung
diseases, pulmonary vascoonstriction, inflammation, allergic rhinitis,
caute asthma, allergies, asthma, impeded respiration, respiratory
clistenss syndrome, pain, cystic fibrosis, pulmonary hypertension,
clistenses syndrome, pain, cystic fibrosis, pulmonary hypertension,
clistenses (COPD), and cancer, lung cancer, pancreatic cancer,
colon cancer, breast cancer, lung cancer, melanoma, hepatic metastases,
as all three of cancer and the concert as a series and confirmed and and the concert and and the concert and and the cancer and the concert and and the concert and and the concert and and the cancer and the cancer and the concert and the co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, a
well as all types of cancers which may metastasize or have metastasized
to the lungs, including breast and prostate cancer
                                                                                                                                                                                                                                                                                                                              pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides used in treatment of, e.g. pulmonary
                                                                                                                                                                                       Antisense oligonucleotide, multiple target, antisense treatment, impaired respiration, inflammation; lung disease, pulmonary vasoconstriction, inflammation, allergic rhinitis, acute asthma, allergy, asthma, impeded respiration, respiratory distress syndrome; pain, cystic fibrosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 14;
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Pred. No. 1.2e+03;
0; Mismatches 2; Indels
                                                                                                                                      Human IL-5 receptor antisense oligonucleotide fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 14 BP; 0 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 50; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98WO-US019419.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US-0059160P.
98US-00093972.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYEC-) UNIV EAST CAROLINA.
                                                                             05-JUL-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 prostate cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-229400/19.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            vasoconstriction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9913886-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-SEP-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nyce JW;
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Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergy; disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiallergic; antiallergic; prostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
                                                                   Low adenosine antisense oligonucleotide SEQ ID NO:1159.
        AAA33470 standard; DNA; 14 BP.
                                                                                                                                                                                                                                                                     98US-0095212P.
                                                                                                                                                                                                                                                99WO-US017712.
                                                 (first entry)
                                                                                                                                                                                                        WO200009525-A2.
                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                 03-AUG-1999;
                                                                                                                                                                                                                                                                      03-AUG-1998;
                                                 28-JUL-2000
                                                                                                                                                                                                                            24-FEB-2000.
                              AAA33470;
A33470
                                                                                                                                \mathbf{x}
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New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or WPI; 2000-205971/18. Nyce JW

(UYEC-) UNIV EAST CAROLINA.

Claim 18; Page 410; 1343pp; English.

The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic associated with inflammation, impaired alivays, including lung disease associated with inflammation, effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impedded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metesstasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the observations with a sequences side effects. The A-containing ONs break down with the correspond to style and inflammation AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 1885, but the sequences differ from the previously named sequences SEQ ID NO:1 to 1885, but the sequences of from the previously named sequences SEQ ID NO:1 to 1880 (AAA3233 to AAA3323 AAA33992) are specifically claimed ONS from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence listing

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Gaps
                                                                       0;
                                  13.4%; Score 9.8; DB 1; Length 14; 84.6%; Pred. No. 1.2e+03; ive 0; Mismatches 2; Indels
Sequence 14 BP; 0 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
                                                                               11; Conservative
                                                          Best Local Similarity
                                         Query Match
                                                                               Matches
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Low adenosine antisense oligonucleotide; phosphorothicate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; burnfactant depletion; respiratory; bronchodilator; antinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasconstriction; asthma, RbS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                          Human IL5 receptor polynucleotide fragment #1159.
                                                                 AAF19592 standard; DNA; 14 BP.
                                                                                                                                                                                                                                                                                                                  24-MAR-2000; 2000WO-US008020.
                                                                                                                                                                                                                                                                                                                                     99US-0127958P.
                                                                                                                                                                                                                                                                                                                                                         EAST CAROLINA.
J W.
921
                                                                                                          (first entry)
                  13
 909 TTTCTTTGGTCTT
            TICCITIGCICTI
                                                                                                                                                                                                                                                                             WO200062736-A2.
                                                                                                                                                                                                                                                                                                                                      06-APR-1999;
                                                                                                                                                                                                                                                                                                                                                         (UYEC-) UNIV
(NYCE/) NYCE
                                                                                                         14-MAR-2001
                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                               26-OCT-2000.
                                                                                                                                                                                                                                        cancer; ss.
                                                                                      AAF19592;
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                                                RESULT 1276
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low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions.

WPI; 2000-679539/66

Claim 14; Page 209; 1592pp; English.

The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with cumy/respiratory disorders and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central cransmitters, defensins, growth factors, was one-nervous system creceptors, binding proteins and malignancy associated proteins. The receptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders and conthoronstriction and/or lung inflammation, allergy(les) and/or construction to bronchoconstriction and/or lung inflammation, inflammation and/or southers of control which are associated with a disease or control control or control o condition selected from pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary

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hypertension, emphysema, chronic obstructive pulmonary disease (COPD), pulmonary transplantation rejection, pulmonary infections, bronchitis, and/or cancer. AAF18434 to AAF21543 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of
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                                                                                                                                            13.4%; Score 9.8; DB 1; Length 14; 84.6%; Pred. No. 1.2e+03; tive 0; Mismatches 2; Indels
                                                                                                                                                                                 2; Indels
                                                                                                             G; 8 T; 0 U; 0 Other;
                                                                                                         Sequence 14 BP; 0 A; 4 C; 2
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                                                                                                                                                                             11; Conservative
                                                                                                                                                                                                                 909 TITCTITGGICTI
                                                                          the present invention
                                                                                                                                                           Local Similarity
                                                                                                                                            Query Match
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BP.

Rod opsin hairpin ribozyme oligonucleotide.

ABZ72882 standard; RNA; 14 BP.

RESULT 1278

09-APR-2003 (first entry)

ABZ72882;

Hairpin ribozyme; hammerhead ribozyme; ribozyme; retinal disease; target; ophthalmological; gene therapy; eye; retinal dysfunction; AAV; diabetic retinopathy; macular degeneration; autosomal dominant retinitis; blood-retinal barrier dysfunction; adeno-associated virus; blindness; ss.

01-MAY-2002; 2002WO-US013679.

01-MAY-2001; 2001US-00847601.

Grant MB;

A recombinant adeno-associated virus-vectored ribozyme composition, useful for treating a disease or dysfunction of the mammalian eye e.g. retinal disease, e.g. diabetic retinopathy or age-related macular

Example 5; Page 61; 115pp; English.

The present invention describes a recombinant adeno-associated virus (AAV) vectored ribozyme composition (I). (I) comprises: (a) at least a first ribozyme that specifically cleaves an mRNA encoding a protein, polypeptide, or peptide selected from the group of rod opsin, iNOS. RDS/Peripherin, VEGFRI, VEGFRI, adenosine A-2B receptor, IGF-1, integrin alpha 3, integrin alpha 5, or integrin alpha V, (b) a vector comprising a polynucleotide encoding the ribozyme, where the polynucleotide operably positioned downstream of at least a first promoter that directs expression of the polynucleotide in a selected mammalian cell transformed with the vector; (c) a viral particle comprising the ribozyme or the polynucleotide; (d) an AAV vector comprising the ribozyme or the polynucleotide; or (e) a host cell comprising the ribozyme or the polynucleotide. Also described is a method for decreasing the amount of mRNA encoding a selected polypeptide in a retinal cell of a mammalian eye, comprising providing to the eye the composition described above, and for a time effective to specifically cleave the mRNA in the cell. (1) has ophthalmological activity, and can ABZ72881/c

D ABZ72881/c

XX

A BZ72881;

XX

ABZ72881;

YX

YX

ABZ72881;

YX

B co opsin hairpin ribozyme ol

XX

Hairpin ribozyme; hammerhead

XM

Hairpin ribozyme

XM

NO200288320-A2.

XM

O1-NAY-2002; 2002WO-US013679.

XM

O1-NAY-2002; 2002WO-US013679.

XM

O1-NAY-2001; 2001WS-00847601.

XM

O1-NAY-2001; 2001WS-00847601.

XM

O1-NAY-2001; 2001WS-00847601.

XM

O1-NAY-2001; 2001WS-00847601.

XM

The win AS, Shaw LC, Grant MB

XM

WPI; 2003-111880/10.

XM

WPI; 2003-111880/10.

XM

XM

WPI; 2003-111880/10.

XM

XM

The present invention descrifice

C AAV) vectored ribozyme compc

C AAV) vectored ribozyme or the comprising the ribozyme or the comprising the ribozyme or the comprising the ribozyme or the composition described above,

C C Celeave the mRNA in the cell.

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dysfunction of the mammalian eye, such as a retinal disease or retinal dysfunction, (diabetic) retinopathy, or (age-related) macular degeneration. (I) is also useful for manufacturing a medicament for treating the diseases mentioned above, including autosomal dominant retinitis or a blood-retinal barrier dysfunction. (I) can also be useful pathological condition, e.g. atrophic or pigmented lesions of the eye, blindness, a reduction in central or peripheral vision, or a reduction in total vision. ABZ72763 to ABZ72953 represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                               Gaps
  in gene therapy. (I) can be used for treating a disease or
                                                                                                                                                                                                                                                                                                                                                                             ..
                                                                                                                                                                                                                                                                                                                      13.4%; Score 9.8; DB 1; Length 14; 84.6%; Pred. No. 1.2e+03; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                           Sequence 14 BP; 6 A; 1 C; 7 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                 922 TGCCTTTTATCCC 934
                                                                                                                                                                                                                                                                                                                                                                   11; Conservative
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                                                                                                                                                                                                                                                                                                                                                Local Similarity
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Hairpin ribozyme; hammerhead ribozyme; ribozyme; retinal disease; target; ophthalmological; gene therapy; eye; retinal dysfunction; AAV; diabetic retinopathy; macular degeneration; autosomal dominant retinitis; blood-retinal barrier dysfunction; adeno-associated virus; blindness; ss. Rod opsin hairpin ribozyme oligonucleotide. Synthetic

WO200288320-A2. Homo sapiens. 07-NOV-2002. 01-MAY-2002; 2002WO-US013679. 01-MAY-2001; 2001US-00847601.

(UYFL) UNIV FLORIDA.

Shaw LC, Lewin AS,

Grant MB;

WPI; 2003-111880/10.

e.g. A recombinant adeno-associated virus-vectored ribozyme composition, useful for treating a disease or dysfunction of the mammalian eye e retinal disease, e.g. diabetic retinopathy or age-related macular degeneration,

Example 5; Page 61; 115pp; English.

The present invention describes a recombinant adeno-associated virus (AAV) vectored ribozyme composition (I). (I) comprises: (a) at least a first ribozyme that specifically cleaves an mRNA encoding a protein, polypeptide, or peptide selected from the group of rod opsin, iNOS, RDS/peripherin, VEGFR1, VEGFR2, adenosine A-2B receptor, IGF-1, integrin alpha 1, integrin alpha 3, integrin alpha 5, or integrin alpha V; (b) a alpha 1, integrin alpha 9, integrin alpha 6, or integrin alpha V; (b) a polynucleotide operably positioned downstream of at least a first promoter that directs expression of the polynucleotide in a selected mammalian cell transformed with the vector; (c) a viral particle comprising the ribozyme or the polynucleotide; (d) an AAV vector

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comprising the ribozyme or the polynuclectide, or (e) a host cell comprising the ribozyme or the polynuclectide. Also described is a method for decreasing the amount of mRNA encoding a selected polypeptide in a retinal cell of a mammalian eye, comprising providing to the eye the composition described above, and for a time effective to specifically cleave the mRNA in the cell. (I) has ophthalmological activity, and can be used in gene therapy. (I) can be used for treating a disease or dysfunction of the mammalian eye, such as a retinal disease or retinal dysfunction. (I) is also useful for manufacturing a medicament for treating the disease mentioned above, including autosomal dominant retinities or a blood-retinal barrier dysfunction. (I) can also be useful for remaining the symptoms of a pathological condition, e.g. atrophic or a medicament for symptoms of a pathological condition, e.g. atrophic or pigmented lesions of the eye, blindness, a reduction in central vision, or a reduction in the total vision. ABZ72763 to ABZ72953 represent sequences used in the exemplification of the present invention
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Sequence 14 BP; 6 A; 1 C; 7 G; 0 T; 0 U; 0 Other;

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Gaps
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13.4%; Score 9.8; DB 1; Length 14; 84.6%; Pred. No. 1.2e+03; 1ive 0; Mismatches 2; Indels
                                 Conservative
   Query Match
Best Local Similarity
                                 11;
                                  Matches
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922 TGCCTTTTATCCC 934 a recerectarice 14

ABZ95286 standard; DNA; 14 BP. (first entry) 17-0CT-2003 ABZ95286; ESULT 1279 BZ95286

Human, antisense, lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiinflammatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.

Human IL-5 receptor antisense fragment no.1150.

Homo sapiens

WO200285308-A2

31-OCT-2002.

23-APR-2002; 2002WO-US013135.

24-APR-2001; 2001US-0286137P.

(EPIG-) EPIGENESIS PHARM INC.

Aguilar D; Katz E, Pabalan J, S; Sandrasagra A, Li Y, San Tang L, WPI, 2003-229219/22. Miller S, Nyce JW,

Pharmaceutical composition for treating allments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or Disclosure; SEQ ID NO 10528; 872pp; English. ubiquinone

The invention relates to a novel pharmaceutical composition, which has first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions,

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Sequence 15 BP; 6 A; 0 C; 9 G; 0 T; 0 U; 0 Other;

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cc junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunctions and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, has antiinflammatory, antiallergic, antiasthmatic, hypotensive, cuse in antisense gene therapy. The composition may have a cuse in antisense gene therapy. The composition may have a composition to preventing a respiratory, lung or mallignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine corrector, producing bronchodilation, increasing levels of adenosine corrector, producing bronchodilation, increasing levels of ubiquinone or lung inflammation, lung allergies, or a respiratory disease or condition. Once: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This sequence is a triplex probe complementary to the duplex PCR product following amplification of a triple helix forming target sequence, and could be used to detect the presence of HBV. See also AAQ26566-614 (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleic acid sequence detection by triple helix formation for pathogenic organisms - comprises amplifying in vitro to give product duplex(es) and detecting one duplex by hybridising with a third strand of nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        detection; hybridisation; probes; primers; target sequence; pathogenic organisms; bacteria; fungii; virus; retrovirus; ss.
                                                                                                                                                                                                                                                                                                                                                                         13.4%; Score 9.8; DB 1; Length 14; 84.6%; Pred. No. 1.2e+03;
                                                                                                                                                                                                                                                                                                                                                                                                             2; Indels
                                                                                                                                                                                                                                                                                                                                     Sequence 14 BP; 0 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                         at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 45; Page 59; 80pp; English.
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Best Local Similarity 84.69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HBV triplex probe.
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15-JAN-1993
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schultz1-899.rng

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01-JUL-1993
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                                                                                Synthetic.
                                                                                                                                                                                                                                                                  for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAQ68767;
                                                                                                                                                                                                             Liu J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ68767
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The sequences given in AAQ38150-59 are primer/probes which correspond to a region 5' of the 16S and 23S rRNA genes of Mycobacterial sp. and members of subgeneric classes. These oligomers hybridise to 10% of other bacterial sp. including mycobacterium sp.,these are non-exclusive. The primer/probe sequences given in AAQ38108-46 hybridise under assay conditions to rRNA/rDNA from >90% of common mycobacterium sp., these oligomers are non-exclusive. All these oligomers can be used to detect Mycobacterium and their subgeneric classes by hybridisation or by amplification. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                      Oligo-nucleotide(s) complementary to Mycobacterial ribosomal RNA or DNA used for detection and identification of Mycobacterial in hybridisation and amplification assays.
                                                                                                                                                                                                                  Primer, probe, 168, 238, rRNA, Mycobacteria, subgeneric, class, rDNA,
hybridisation, amplify, PCR, ss.
                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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0
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0
    Length 15;
13.4%; Score 9.8; DB 1; Length 15
84.6%; Pred. No. 1.2e+03;
Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13.4%; Score 9.8; DB 1; Length 15; larity 73.3%; Pred. No. 1.2e+03; Conservative 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                           Mycobacterium 23S rRNA non-exclusive probe/primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 2 A; 6 C; 1 G; 5 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 20; 121pp; English.
                                                                                                                                                                                                                                                                                                                                                                                Shah JS
                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                92WO-US006821.
                                                                                                                                                                                                                                                                                                                                    91US-00744282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               920 TITGCCTTITATCCC 934
                                                                                                                  AAQ38155 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 rraccmrrrcacccc 15
                                          924 CCTTTTATCCCTC 936
                                                                                                                                                                         (first entry)
                     Conservative
                                                         CCTTCCTCCTC 1
                                                                                                                                                              (revised)
                                                                                                                                                                                                                                                                                                                                                                             Liu J, Nietupski RM,
                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1993-094026/11.
          Local Similarity
es 11; Conserv
                                                                                                                                                                                                                                                                                                                                                       (STAD ) AMOCO CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                              13-AUG-1992;
                                                                                                                                                                                                                                                                                                                                    13-AUG-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Simi
Matches 11;
                                                                                                                                                            25-MAR-2003
01-JUL-1993
                                                                                                                                                                                                                                                                                        04-MAR-1993
                                                                                                                                                                                                                                                Synthetic.
                                                              13
 Query Match
                                                                                                                                       AAQ38155;
                                                                                                                                                                                                                Primer;
                                                                                             RESULT 1281
           Best Loc
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
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AAQ38157 standard; DNA; 15 BP.

RESULT 1282

25-MAR-2003 (revised)

AAQ38157

AAQ38157 ID AAQ3 XX AC AAQ3 XX DT 25-M

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The sequences given in AAQ38150-59 are primer/probes which correspond to a region 5' of the 16S and 23S rRNA genes of Mycobacterial sp. and members of subgeneric classes. These oligomers hybridise to 10% of other bacterial sp. including mycobacterium sp., these are non-exclusive. The primer/probe sequences given in AAQ38108-46 hybridise under assay conditions to rRNA/rDNA from >90% of common mycobacterium sp., these oligomers are non-exclusive. All these oligomers can be used to detect Mycobacterium and their subgeneric classes by hybridisation or by amplification. (Updated on 25-WAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cleotide(s) complementary to Mycobacterial ribosomal RNA or DNA detection and identification of Mycobacterial in hybridisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Polymerase chain reaction; primer; PCR; amplify; heavy; light; chain; complementarity determining region; CDR; variable; constant; region; monoclonal antibody; MAD; binding affinity; EDTA; DOTA; tumour; cancer; colorectal; breast; metal chelate; hapten; ss.
                                                23S; rRNA; Mycobacteria; subgeneric; class; rDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3; Indels
Mycobacterium 23S rRNA non-exclusive probe/primer #5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHA255 heavy chain CDR3 clone 3.7.1. coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 1 A; 6 C; 2 G; 5 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13.4%; Score 9.8; DB 1; 73.3%; Pred. No. 1.2e+03; iive 1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 20; 121pp; English.
                                             Primer; probe; 16S; 23S; rRNA; M
hybridisation; amplify; PCR; ss.
                                                                                                                                                                                                                                                                                                                                                                                                     Shah JS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAQ68767 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                         91US-00744282
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and amplification assays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                Nietupski RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1993-094026/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligo-nucleotide(s)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                  (STAD ) AMOCO CORP
                                                                                                                                                               WO9304201-A1
                                                                                                                                                                                                                                                        13-AUG-1992;
                                                                                                                                                                                                                                                                                                      13-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-NOV-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
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Hubbell EA; , Sheldon EL;

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/note= "N is A, T, C or G, i.e. the sequence represents a set of 4 probes"
                                                                                                                                                                                                                                                                                     An array of oligomucleotide probes immobilised on a solid support (a chip) comprises a set of probes chosen from sequences AAQ88361-088370. Each probe comprises a segment of at least 3 nucleotides exactly complementary to a subsequence of the CFTR gene, the segment including at least one interrogation position complementary to a corresp. nucleotide in the CFTR gene. The array also comprises three more probe sets which each have sequences identical to the first set except at the interrogation position. A target sequence can be analysed by determining the extent of hybridisation at particular probes in the array
                                                                                                                                                                                 New arrays of oligo:nucleotide probes - used for comparing known sequences with variants for detection of mutation(s) and sequencing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tiling strategy; immobilised nucleic acid probe array; CFTR gene; cystic fibrosis transmembrane conductance regulator; hybridisation; biological chip; interrogation position; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chee M, Cronin MT, Fodor SP, Gingeras TR, Huang XC, H
Lipshutz RJ, Lobban PE, Miyada CG, Morris MS, Shah N,
                                                                           Chee M, Cronin MT, Fodor SP, Gingeras TR, Huang XC, H<sup>1</sup>
Lipshutz RJ, Lobban PE, Miyada CG, Morris MS, Shah N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 9.8; DB 1; Length 15; Pred. No. 1.2e+03; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 8 A; 2 C; 3 G; 1 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Set of 15mer probes for CFTR gene analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                      Claim 88; Page 154; 223pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (AFFY-) AFFYMAX TECHNOLOGIES NV.
                                          (AFFY-) AFFYMAX TECHNOLOGIES NV.
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94US-00284064.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94WO-US012305.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13.4%;
78.6%;
94US-00284064.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          911 TCTTTGGTCTTTGC 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAQ88370 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ď Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14 rcrirnGrerricc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 13.4
Best Local Similarity 78.6
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1995-178887/23
                                                                                                                                             WPI; 1995-178887/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-OCT-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-OCT-1993;
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  02-AUG-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1285
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                 The sequences given in AAQ68758-68 encode the wild type and mutagneised versions of the complementarity determining region 3 (CDR3) of the autibody designated CHA255. CHA255 is a mutine monoclonal antibody (MAb) which is capable of binding complexes. Mutagenesis of these CDR8, causes the production of polypeptides with a particularly high binding affinity for EDTA or DOTA metal complexes. CDR1 and -3 of the heavy chain, and residues of both CDR1 and -3 of the CHA255 heavy chain, five of seven residues of both CDR1 and six of nine light chain, five of seven residues of light chain CDR and six of nine light chain, five of seven residues of light chain CDR and six of nine light chain CDR3 residues of this such a seed in compositions for in vivo imaging of malignant tissues or tumours. They are also useful for the treatment of malignant tissues or tumours eg. colorectal or breast cancer. Both methods involve the use of radiounclides which bind to metal chelates or haptens which are specifically delivered to the target site by a targetting molecule. CDR derived peptides may be used to construct bi-functional antibodies having dual specificities, or as donor or recipients of CDR sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
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/note= "N is A, T, C or G, i.e. the sequence represents a
set of 4 probes"
                                                                                                                                                                                            Polypeptide used in imaging and treatment of carcinomas and tumours -comprising substd antibody CDR having binding affinity for metal chelate of EDTA or DETA or analogues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tiling strategy; immobilised nucleic acid probe array; CFTR gene; cystic fibrosis transmembrane conductance regulator; hybridisation; biological chip; interrogation position; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 2 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Set of 15mer probes for CFTR gene analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                     Claim 25; Fig 3A; 61pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ88369 standard; DNA; 15 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13.4%;
84.6%;
           92US-00975230
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag=
                                                                                               Moore MD;
                                                     (HYBR-) HYBRITECH INC.
                                                                                                                                       WPI; 1994-209063/26.
P-PSDB; AAR54165.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
misc_difference
                                                                                               Ahrweiler PM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-OCT-1994;
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           12-NOV-1992;
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Matches

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AQ88369,

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Gaps

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Hubbell EA; , Sheldon EL;

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Stinchcomb DT,
                               1994;
                                        11-OCT-1994;
04-NOV-1994;
                                                                                       16-DEC-1994;
                                                                                               23-DEC-1994;
                                                                10-NOV-1994;
                                                                          28-NOV-1994
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24-MAR-1997
                                                                                                                                                                              Modak A,
Tracz D,
                                                                                                                                                                      Grimm S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT54220;
                 03-0CT-1
07-0CT-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                             field.)
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                                                    An array of oligonucleotide probes immobilised on a solid support (a chip) comprises a set of probes chosen from sequences AAQ88361-Q88370. Each probe comprises a segment of at least 3 nucleotides exactly complementary to a subsequence of the CFTR gene, the segment including at least one interrogation position complementary to a corresp. nucleotide in the CFTR gene. The array also comprises three more probe sets which each have sequences identical to the first set except at the interrogation position. A target sequence can be analysed by determining the extent of hybridisation at particular probes in the array
                                                                                                                                                                                                                                                                                                                                                                                                                          Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restensis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                         Gaps
New arrays of oligo:nucleotide probes - used for comparing known sequences with variants for detection of mutation(s) and sequencing
                                                                                                                                                                                                                                                                                                                                                                                                      Human IL-5 hammerhead ribozyme target sequence (nt. position 772)
                                                                                                                                                                                                                         .
0
                                                                                                                                                                                               Score 9.8; DB 1; Length 15; Pred. No. 1.2e+03;
                                                                                                                                                                                                                       3; Indels
                                                                                                                                                                       Sequence 15 BP; 9 A; 2 C; 3 G; 0 T; 0 U; 1 Other;
                                                                                                                                                                                                                      0; Mismatches
                                  Claim 88; Page 154; 223pp; English.
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94US-00218334.
94US-00222795.
94US-00227958.
94US-00227958.
94US-00245736.
94US-0029132.
94US-0029143.
94US-0029143.
94US-0030000.
94US-00311749.
                                                                                                                                                                                                                                                                                                                        AAT54336 standard; RNA; 15 BP
                                                                                                                                                                                              13.4%;
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                                                                                                                                                                                                                                           911 TCTTTGGTCTTTGC 924
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                                                                                                                                                                                                          Local Similarity 78.6
es 11; Conservative
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24-MAR-1997
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18-MAY-1994;
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15-APR-1994
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02-SEP-1994
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                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                  RESULT 1286
                                                                                                                                                                                                                     Matches
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The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-5) mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and haltpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating crown as the ribozymes clave the synthesis of IL-5 in lymphocytes and preventing the recruitment and activation of sosinophilia. The cribozymes can also be used to treat eosinophilia (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated cosinophilia—myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
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                                                                                                                                                                                                                                                                                                                                                                 o DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ribozymes having modified bases and methods for producing them - for use
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 5 A; 0 C; 1 G; 0 T; 9 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 2; Page 215; 407pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                            Pavco P, Beigleman L
Usman N, Wincott FE,
                       94US-0031671.
94US-00319492.
94US-00334847.
94US-00337608.
94US-00357577.
94US-00353233.
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94US-00314397
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1 AUUUAUUUAAUGU 13
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Best Local Similarity
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943 ATTGGTTTAATGT 955

ATTGGTTTACTCT

15

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1288

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many treatment arguments a preference cleaves interleukin-5 (II-c) many at the mucleic acid (i.e. a ribozyma) which cleaves interleukin-5 (II-c) many at the mucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistence. The ribozymes cleave the II-5 target sequences and thereby inhibit II-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of II-5 in lymphocytes and preventing the recruitment and activation of eosinophils. The ribozymes can also be used to treat eosinophilia (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated cosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
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Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SW, Sweedler D, Thompson
Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ribozymes having modified bases and methods for producing them - for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     in inhibiting disease related genes.
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94US-0022795.
94US-00224483.
94US-00228041.
94US-00245736.
94US-00291832.
94US-00291832.
94US-00291832.
94US-0029183.
94US-00300000.
94US-00301434.
94US-00301434.
94US-00301434.
94US-0031486.
94US-0031486.
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94US-00345516
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16-AUG-1994;
17-AUG-1994;
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03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
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-SEP-1994;
-SEP-1994;
-SEP-1994;
  Homo sapiens.
                                                         W09523225-A2
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04-APR-1994;
07-APR-1994;
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15-APR-1994;
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06-JUL-1994;
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10-NOV-1994;
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23-DEC-1994)
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Modak A,
Tracz D,
WANNERSCOUNTER WARRENGER W
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a B, Direnzo A, Draper KG, Dudycz LW;
Kisich K, Matulic-Adamic J, Mcswiggen JA;
gleman L, Sullivan SM, Sweedler D, Thompson JD;
cott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ribozymes having modified bases and methods for producing them - for use
                                                                                             Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                         Human TNF-alpha hammerhead ribozyme target sequence (nt position 504).
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Pavco P, Beigleman L,
Usman N, Wincott FE,
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94US-0021834.
94US-00224483.
94US-00224483.
94US-0022758.
94US-00271280.
94US-00291433.
94US-00292620.
94US-00292620.
94US-00314397.
94US-00314397.
94US-00314397.
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94US-00337608.
94US-00345516.
94US-00357577.
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AAT55664 standard; RNA; 15
                                                        (first entry)
                                             (revised)
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10-NOV-1994;
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                                             25-MAR-2003
21-MAR-1997
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02-SEP-1994
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Modak A,
Tracz D,
                       AAT55664;
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Gaps

÷ 0

13.4%; Score 9.8; DB 1; Length 15; 84.6%; Pred, No. 1.2e+03; ...ve 0; Mismatches 2; Indels

11; Conservative

Local Similarity

Query Match Matches Best

C; 4 G; 0 T; 2 U; 0 Other;

Sequence 15 BP; 7 A; 2

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23-SEP-1994;
28-SEP-1994;
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11-0CT-1994;
                                           3-0CT-1994;
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22-APR-1997
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Modak A,
Tracz D,
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Matches
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                                           The present sequence represents a preferred target sequence for an the present cauld (i.e. a ribozyme) which cleaves TNF-alpha mRNA at the nucleotide base position indicated in the DB line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes are designed to cleave the target sequences and thereby inhibit TNF-alpha expression, making them potentially useful for treating rheumatoid arthritis, septic shock and other inflammatory disorders including psoriasis, as well as for treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthitis; psoxiasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                      Sequence 15 BP; 2 A; 5 C; 4 G; 0 T; 4 U; 0 Other;
in inhibiting disease related genes.
                     Claim 2; Page 241; 407pp; English.
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94US-0022795.
94US-00227483.
94US-0022758.
94US-00271280.
94US-00271280.
94US-0029132.
94US-0029132.
94US-0029133.
94US-0029120.
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                                                                                                                                                                                                                                                                              935 TCCTCTTCATTGG 947
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                                                                                                                                                                                                                             Query Match
Best Local Similarity 53.8
Matches 7; Conservative
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24-MAR-1997
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18-MAY-1994;
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The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-5) mRNA at the nuclectide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes and preventing the recruitment and activation of ecsinophils. The ribozymes can also be used to treat eosinophilia (related to parasitic infection or with pulmonary infiltration) and intryptophan-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                      Mcswiggen JA;
er D, Thompson JD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ribozymes having modified bases and methods for producing them - for use
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mouse IL-5 hammerhead ribozyme target sequence (nt. position 825).
                                                                                                                                                                                                                                                                                                                                                                                                            Dudycz LW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necroasis factor; TNF-alpha; respiratory syncytial virus; R&V; bor-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosalerosis; mycocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis;
                                                                                                                                                                                                                                                                                                                                                                                              ub DT, Chowrira B, Direnzo A, Draper KG, Dudycz I
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswigg
Pavco P, Beigleman L, Sullivan SM, Sweedler D,
Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13.4%; Score 9.8; DB 1; Length 15; 46.2%; Pred. No. 1.2e+03; tive 5; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 5 A; 1 C; 4 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 2; Page 214; 407pp; English.
94US-00311749.
94US-00314397.
94US-00316471.
94US-00321993.
94US-00334647.
94US-00337517.
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                                                                                                                                                                                                                                                       94US-00363233
95US-00380734
                                                                                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC.
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1 UUGGUGUAAUGAA 13
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                                                                                                                                                                                                                                                                                                                                                                                                   Stinchcomb DT,
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Gaps

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Indels

5

Mismatches

3

Conservative

8

Matches

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myocardial ischaemia; Kawasaki disease; septic shock; HIV;
human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                     94US-00201109.
94US-00218934.
94US-00224483.
94US-0022458.
94US-002245736.
94US-00245736.
94US-0029133.
94US-0029132.
94US-0039133.
94US-00311749.
94US-00311749.
94US-00311749.
94US-00311749.
94US-00311949.
94US-00311949.
                                                                                                                                                                                                     94US-00345516.
94US-00357577.
94US-00363233.
95US-00380734.
                                                           95WO-IB000156
                                                                                                                                                                                                                                    (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                               Stinchcomb DT,
                                                                                                                                                                   28-SEP-1994;
03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
04-NOV-1994;
                                                                                                                                                08-SEP-1994;
23-SEP-1994;
23-SEP-1994;
                        Mus musculus.
                                     WO9523225-A2
                                                           23-FEB-1995;
                                                                                                                                                                                                10-NOV-1994;
28-NOV-1994;
                                                                                                                           16~AUG-1994;
                                                                                                                                            02-SEP-1994;
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                                                                                                    APR-1994
                                                                                                               06-JUL-1994;
                                                                                                                                 17-AUG-1994
                                                                                                                                                                                                                  23-DEC-1994
                                                31-AUG-1995
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, DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Bacjeleman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T; Pavco P, Usman N, WPI; 1995-351090/45 Grimm S, Modak A, Tracz D,

Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.

Claim 2; Page 221; 407pp; English.

The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-5) mRNA at the nucleotide base position indicated in the DB line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes and preventing the recruitment and activation of eosinophils. The ribozymes can also be used to treat ecsinophilia (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated essinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI Eield.

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Score 9.8; DB 1; Length 15; Pred. No. 1.2e+03;
Sequence 15 BP; 2 A; 10 C; 0 G; 0 T; 3 U; 0 Other;
                                        13.4%;
61.5%;
                                            Query Match
Best Local Similarity
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Mcswiggen JA;
ler D, Thompson JD;
                                                                                                                                                                                                                                                                                                                                                                                       Bnzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; red A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                             Human ICAM hammerhead ribozyme target sequence (nt. position 1294)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dudycz LW;
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94US-00288041.
94US-00271280.
94US-0029133.
94US-00292620.
94US-00292620.
94US-00393620.
94US-00303039.
94US-0031439.
94US-00314371.
94US-00314371.
94US-00314377.
94US-00314377.
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94US-00222795.
94US-00224483.
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95US-00380734
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                                                                                                                                                          949/c
AAT51949 standard; RNA; 15
                                                                                                                                                                                                                                                                              (revised)
(first entry)
931 TCCCTCCTCTTCA 943
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08-SEP-1994;
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18-MAR-1997
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Modak A,
Tracz D,
                                                                                                                                                                                                                               AAT51949;
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                                                                                                                                                        AAT51949,
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The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant rejection and alleviating symptoms in patients with rheumatcid arthritis, correct PI field.)
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                            Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13.4%; Score 9.8; DB 1; Length 15; 84.6%; Pred. No. 1.2e+03; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 7 A; 4 C; 2 G; 0 T; 2 U; 0 Other;
                                                                                                                    Claim 2; Page 173; 407pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT52087 standard; RNA; 15 BP
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94US-00218934.
94US-00222495.
94US-00227958.
94US-00227958.
94US-00245736.
94US-00291932.
94US-00291932.
94US-00291932.
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ses 11; Conservative
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29-MAR-1994;
04-APR-1994;
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24-MAR-1997
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15-APR-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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AAT52087/C
XX
XX
AC
AAT52087/C
XX
DC
DT
25-MAR-1
DT
24-MAR-1
DT
24-MAR-1
DT
24-MAR-1
DT
24-MAR-1
DT
AT5-DB
WW
DT
CAN
DE
HUMAN IX
CAN
DE
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DT
CAN
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8
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The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the nuclectide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant rejection and alleviating symptoms in patients with rheumatoid architis, asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                 Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Tracz D, Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                        Ribozymes having modified bases and methods for producing them - for use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human IL-5 hammerhead ribozyme target sequence (nt. position 771).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bnzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TWF-alpha; respiratory syncytial virus; R8V; bor-abl; oncogene; translocation; chronic myelogenous leukaemia; CML, cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial inchaemia; Rawasaki disease; septic shock; HIV;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 9.8; DB 1; Length 15;
Pred. No. 1.2e+03;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 3 A; 4 C; 3 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                               in inhibiting disease related genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 2; Page 175; 407pp; English.
94US-00300000.
94US-0031339.
94US-0031149.
94US-0031497.
94US-00316471.
94US-00321993.
94US-00321993.
94US-00345516.
94US-00345516.
94US-00345517.
94US-00345517.
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84.6%;
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Best Local Similarity 84.6
Matches 11, Conservative
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                                                                                                                                         04-NOV-1994;
10-NOV-1994;
                                                                                                                                                                                              16-DEC-1994;
23-DEC-1994;
                                    23-SEP-1994;
                                                     23-SEP-1994;
                                                                       SEP-1994;
                                                                                      03-OCT-1994;
07-OCT-1994;
                                                                                                                          11-OCT-1994;
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24-MAR-1997
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0;

BP.

(first entry)

(revised)

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Mouse IL-5 hammerhead ribozyme target sequence (nt. position 825).
                                                                                 AAT54620 standard; RNA; 15
        943 ATTGGTTTAATGT 955
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2 AUTUNAUTUNAAUGU 14
                                                                                                                            25-MAR-2003
                                                                                                                                     22-APR-1997
                                                                                                        AAT54620;
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                                                                         AAT54620
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                                                                                                                                                                                                                                                                                                                                                                                                                                Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Grimm S, Karpeisky A, Kieich K, Matulic-Adamic J, Mcswiggen JA;
Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Tracz D, Usman N, Wincott FE, Woolf T;
human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ribozymes having modified bases and methods for producing them - in inhibiting disease related genes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 2; Page 215; 407pp; English.
                                                                                                                                940S-00218934.
940S-0022795.
940S-00227958.
940S-00220641.
940S-00245736.
940S-00291232.
940S-00291232.
940S-00291232.
940S-00291232.
940S-00303039.
940S-0031486.
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95US-00380734
                                                                                                  95WO-IB000156
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 4 A; 0
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                                                                                                                                                                                                                                                                       23-SEP-1994;
23-SEP-1994;
28-SEP-1994;
03-OCT-1994;
11-OCT-1994;
04-NOV-1994;
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06-JUL-1994;
15-AUG-1994;
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02-SEP-1994;
08-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                       16-DEC-1994;
23-DEC-1994;
30-JAN-1995;
                                     Homo sapiens
                                                         WO9523225-A2
                                                                                                                                           04-APR-1994;
07-APR-1994;
15-APR-1994;
15-APR-1994;
                                                                                                 23-FEB-1995;
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                                                                             31-AUG-1995
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b DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kieich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T;
Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-ab; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atheroselerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
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94US-00218934-
94US-00224483-
94US-00224483-
94US-002245736-
94US-00291932-
94US-00291582-
94US-00291582-
94US-00311749-
94US-00318771-
94US-00318771-
94US-00318771-
94US-00318771-
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                                                                                                                                                                                                                                                                         Mus musculus.
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18-MAY-1994;
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23-SEP-1994;
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11-OCT-1994;
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17-AUG-1994;
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03-OCT-1994;
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Modak A,
Tracz D,
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Gaps

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13.4%; Score 9.8; DB 1; Length 15; 30.8%; Pred. No. 1.2e+03; ive 7; Mismatches 2; Indels

Best Local Similarity 30.8 Matches 4; Conservative

Query Match

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                                                                                 The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-5) mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistence. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes and preventing the recruitment and activation of eosinophils. The ribozymes can also be used to treat ecosinophilia (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated essinophilia—myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; intercleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; INF-alpha; respiratory syncytial virus; RSy; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumaticid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human TNF-alpha hammerhead ribozyme target sequence (nt position 505).
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                                                  Claim 2; Page 221; 407pp; English.
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94US-00222795
94US-00224483.
94US-00228041.
94US-00245736.
94US-002133.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       931 TCCCTCCTCTTCA 943
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                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
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16-AUG-1994;
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                                                                                                                                                                                                                                                                                                                                  field.
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Thompson JD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Ribozymes having modified bases and methods for producing them - for use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                    b DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA; Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompsc Usman N, Wincott FE, Woolf T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human ICAM hammerhead ribozyme target sequence (nt. position 2480).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13.4%; Score 9.8; DB 1; Length 15; 53.8%; Pred. No. 1.2e+03; tive 4; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 2 A; 6 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 2; Page 241; 407pp; English.
              94US-00293520.
94US-00300000.
94US-00311486.
94US-0031148.
94US-00316771.
94US-00318492.
94US-00318492.
94US-00334847.
94US-00337608.
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95US-00380734.
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                                                                                                                                                                                                                                                                                    (RIBO-) RIBOZYME PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 53.8
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                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1995-351090/45.
                                                                                                                03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
                                                                23-SEP-1994;
                                                 08-SEP-1994;
                                                                                23-SEP-1994
                                                                                                  28-SEP-1994;
                                                                                                                                                                 04-NOV-1994;
                                                                                                                                                                                                                   16-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-MAR-2003
24-MAR-1997
                                                                                                                                                                                    10-NOV-1994
                                                                                                                                                                                                                                                                                                                    Stinchcomb
                                                                                                                                                                                                                                                                                                                                     Grimm S,
Modak A,
Tracz D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT52089;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
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0

BP.

AAX66317 standard; RNA; 15

AAX663

(first entry)

20-JUL-1999

AAX66317;

959 GCTACCAACGGTG 971

N

14 GCTAACAAAGGTG

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enzymatic uncleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant rejection and alleviating symptoms in patients with rheumatoid arthritis, asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Tracz D, Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
transplant rejection; rheumatoid arthritis; psoriasis;
myocardial ischaemia; Kawasaki disease; septic shock; HIV;
human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       present sequence represents a preferred target sequence for an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 2; Page 175; 407pp; English.
                                                                                                                                                                                               9405-00218934.
9405-0022795.
9405-0022795.
9405-00228041.
9405-00245736.
9405-00291932.
9405-00291932.
9405-00291832.
9405-00391260.
9405-003912486.
9405-00311486.
9405-0031148.
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94US-00357577.
94US-00363233.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95US-00380734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1995-351090/45.
                                                                                                                                                                                                                                                   15-APR-150.
18-MAY-1994;
06-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                        03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
04-NOV-1994;
10-NOV-1994;
16-DEC-1994;
                                                                         Homo sapiens
                                                                                                     WO9523225-A2
                                                                                                                                                           23-FEB-1995;
                                                                                                                                                                                                                                                                                                15-AUG-1994;
                                                                                                                                                                                                                                                                                                             16-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                              23-SEP-1994;
28-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-DEC-1994;
30-JAN-1995;
                                                                                                                                                                                                                                           -APR-1994;
                                                                                                                                                                                                                                                                                                                                         19-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                    08-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                 SEP-1994;
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                                                                                                                                31-AUG-1995
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The present invention describes a novel enzymatic nucleic acid (ENA)

CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues

CC ; (ii) a 2'.-Callyl modification at position 4 of the ENA; (iii) at least

CC can inhibit collagenase and stromelysin production in the synovial

CC membrane of joints for the treatment or prevention of arthritis,

CC membrane of joints for the treatment or prevention of arthritis,

CC membrane of joints for the treatment or prevention of arthritis,

CC membrane of joints for the treatment or prevention of arthritis,

CC membrane of joints for the treatment or prevention of arthritis,

CC membrane of joints for the treatment or prevention of arthritis,

CC membrane of joints for the treatment or prevention of a chipting or the contract of a donor. They can also be used to treat antigen presenting alloantigen of a donor. They can also be used for creating allergies and other inflammatory conditions. The ENA's can also be used in diagnosis. Ribozyme therapy impacts on the expression of stromelysin which accompany treatment with retinoids and dexamethasone.

CC The concentration of ribozyme required to affect a therapeutic treatment cc specific. The present sequence is used in the exemplification of the present invention
                                                                                                                    Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Enzymatic nucleic acid molecules having a hammer-head motif - used for
the treatment of arthritis, induction of graft tolerance or treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    , Jarvis T, Draper K, Pavco P;
Usman N, Wincott F, Matulic-Adamic J;
Modak A, Burgin A;
                                                                                   Mouse B7-2 hammerhead ribozyme target SEQ ID NO:2949.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 10; Page 198; 307pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                    95US-00390850.
95US-00426124.
95US-00432874.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95US-00434509.
95US-0000951P.
95US-0000974P.
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Gustofson J, Us
Thompson JD, Mc
                                                                                                                                                                                                                                                                                                                                                                                                    94US-00363253.
94US-00363254.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95US-00541365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       auto-immune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1996-300653/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Beigelman L,
Mcswiggen J,
Karpeisky A,
                                                                                                                                                                                                     diagnosis; ss.
                                                                                                                                                                                                                                                                          WO9618736-A2.
                                                                                                                                                                                                                                                                                                                                               22-NOV-1995;
                                                                                                                                                                                                                                                                                                            20-JUN-1996.
                                                                                                                                                                                                                                                                                                                                                                                                        23-DEC-1994;
23-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-MAY-1995;
04-MAY-1995;
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Gaps

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h. 13.4%; Score 9.8; DB 1; Length 15; Similarity 84.6%; Pred. No. 1.2e+03; 11; Conservative 0; Mismatches 2; Indels

Local Similarity

Query Match Matches

Sequence 15 BP; 3 A; 5 C; 2 G; 0 T; 5 U; 0 Other;

on the

used in diagnosis. Ribozyme therapy

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                                                                                                                                                                                       Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Jarvis T, Draper K, Pavco P;
sman N, Wincott F, Matulic-Adamic J;
odak A, Burgin A;
                                      .
0
                    Length 15;
         Score 9.8; DB 1; Length 15, Pred. No. 1.2e+03;
                                                                                                                                                                     Mouse B7-2 hammerhead ribozyme target SEQ ID NO:2886.
Sequence 15 BP; 2 A; 4 C; 3 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Usman N,
Modak A,
                                                                                                                    BP
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95US-00432874.
95US-00434509.
95US-0000951P.
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94US-00363254.
95US-00390850.
                  13.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 Stinchcomb DT,
                                                                                                                  AAX66254 standard; RNA; 15
                                                     934 CTCCTCTTCATTG 946
                                                                                                                                                                                                                                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gustofson J,
Thompson JD,
                                                                                                                                                      (first entry)
                                                                       CUGCUCAUCAUUG 15
                                    6; Conservative
                           Local Similarity
                                                                                                                                                                                                                             diagnosis; ss
                                                                                                                                                     20-JUL-1999
                                                                                                                                                                                                                                                                WO9618736-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Beigelman L,
Mcswiggen J,
                                                                                                                                                                                                                                                                                                  22-NOV-1995;
                                                                                                                                                                                                                                                                                20-JUN-1996.
                                                                                                                                                                                                                                                                                                                                     23-DEC-1994;
17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Karpeisky A,
                                                                                                                                                                                                                                                                                                                                                        20-APR-1995
                                                                                                                                                                                                                                                                                                                                                                         04-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                02-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                 07-JUL-1995
07-JUL-1995
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                  Query Match
                                                                                                                                                                                                                                              Mus sp.
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ID AAX6
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Geter transfer protein (CETP) hammerhead (HH) ribozymes (see ALT49881-150137). CETP is a 74 kD glycoprotein that facilitates neutral lipid transfer between plasma lipoproteins. The numbering of the targets refers to the position of the cleavage site in full length CETP. The ribozyme binds to 5 nucleotides either side of this site, provided the sequence UH is immediately upstream. The ribozymes are able to cleave mRNA from the gene encoding CETP, thereby blocking synthesis and/or expression of the mRNA. By inhibiting CETP, the reverse cholesterol transport (RCT) pathway can be inhibited (or eliminated) thereby preventing the reduction in size density of the high density lipoproteins (HDL), prolonging HDL half life, and therefore increasing HDL levels. The ribozymes can be used to treat conditions associated with abnormal levels of CETP, specifically familial
                stromelysin without introducing the non-specific effects upon gene rexpression which accompany treatment with retinoids and dexamethasone. The concentration of ribozyme required to affect a therapeutic treatment is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA useful for preventing or treating initial development, progression or regression of vascular diseases, esp. familial hypercholesterolaemia.
                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT49608-T49863 represent target sequences for the human cholesterol
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                                                                                                                                                                                                      Length 15;
                                                                                                                                                                                                                                         2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bisgaier C,
                                                                                                                                                          Sequence 15 BP; 8 A; 2 C; 3 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                13.4%; Score 9.8; DB 1; 84.6%; Pred. No. 1.2e+03; iive 0; Mismatches 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human CETP HH ribozyme target sequence #1564.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Couture L, Stinchcomb D, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; Page 33; 72pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                    AAT49863 standard, RNA, 15 BP.
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                                                                                                                                                                                                                                                                               938 TCTTCATTGGTTT 950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                     11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM (WARN ) WARNER LAMBERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1996-321852/32.
                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-DEC-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT49863;
                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                       Matches
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886666666888
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The present invention describes a novel enzymatic nucleic acid (ENA) having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues i (ii) a 2 'C-allyl modification at position 4 of the ENA; (iii) at least ten 2'-O-methyl modification; and (iv) a 3'-end modification. The ENA's can inhibit collagenase and stromelysin production in the synovial membrane of joints for the treatment or prevention of arthritis, be used to treat antigen presenting cells of adonor to induce tolerance in a recipient to an alloantigen of a donor. They can also be used to treat natigen of a donor. They can also be used for the arceipient to an alloantigen of a donor. They can also be used for treating graft tolerance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also

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Enzymatic nucleic acid molecules having a hammer-head motif - used for the treatment of arthritis, induction of graft tolerance or treatment

Claim 10; Page 197; 307pp; English.

auto-immune diseases.

WPI; 1996-300653/30.

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hyperbetalipoproteinaemia, hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of diabetes, transplant, atherectomy and amgioplastic restenosis. By inhibiting CETP, the levels of HDL and low density lipoproteins (DDL), and the HDL:LDL ratio are favourably altered (a decrease in LDL levels, and a corresponding increase in HDL levels). The HH ribozymes can also be used diagnostically to study genetic drift and mutations in diseased cells, and to detect CETP mRNM. As the HH ribozymes target specific regions of the CETP gene, they have low non-
hypercholesterolaemia, atherosclerosis, peripheral vascular disease.
                                                                                                                                                                                                                                                                 specific activity
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Sequence 15 BP; 1 A; 4 C; 4 G; 0 T; 6 U; 0 Other;

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0
                     Gaps
                     0;
Score 9.8; DB 1; Length 15; Pred. No. 1.2e+03; Mismatches 2; Indels
                      6; Mismatches
 13.4%;
                                           915 TGGTCTTTGCCTT 927
                                                                1 udcacuuudgcuu 13
                       Conservative
   Query Match
Best Local Similarity
                       ι,
                        Matches
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Human CETP HH ribozyme target sequence #1563.
    AAT49862 standard; RNA; 15 BP.
              07-MAR-1997 (first entry)
         AAT49862;
ESULT 1300
  AT49862
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Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage; neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy; reverse cholesterol transport; high density lipoprotein; therapy; CETP; familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia; peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor; angioplastic restenosis; low density lipoprotein; diabetes; HDL; human; LDL; ss.

Homo sapiens.

WO9620279-A1

04-JUL-1996.

95WO-US016000. 11-DEC-1995; 94US-00363240. 23-DEC-1994;

(RIBO-) RIBOZYME PHARM INC. (WARN) WARNER LAMBERT CO.

Ξ Pape Bisgaler C, Mcswiggen J, Stinchcomb D, Couture L,

WPI; 1996-321852/32.

useful for preventing or treating initial development, progression or regression of vascular diseases, esp. familial hypercholesterolaemia. New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA

Claim 4; Page 33; 72pp; English.

AAT495608-T49863 represent target sequences for the human cholesterol ester transfer protein (CETP) hammerhead (HH) ribozymes (see AAT49881-150137). CETP is a 74 kD glycoprotein that facilitates neutral lipid transfer between plasma lipoproteins. The numbering of the targets refers to the position of the cleavage site in full length CETP. The ribozyme binds to 5 nucleotides either side of this site, provided the sequence UH is immediately upstream. The ribozymes are able to cleave mRNA from the gene encoding CETP, thereby blocking synthesis and/or expression of the mRNA. By inhibiting CETP, the reverse cholesterol transport (RCT) pathway can be inhibited (or eliminated) thereby preventing the reduction in size

The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VBGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (fit-1), kinase insert domain containing analogement fixps and/or foetal liver kinase 1 (fit-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
density of the high density lipoproteins (HDL), prolonging HDL half life, and therefore increasing HDL levels. The ribozymes can be used to treat conditions associated with abnormal levels of CETP. specifically familial hypercholesterolaemia, atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia, appealpalipoproteinaemia, dyslipidaemia, vascular complications of diabetes, transplant, atherectomy and angioplastic restenosis. By inhibiting CETP, the levels of HDL and low density lipoproteins (LDL), and the HDL:LDL ratio are favourably altered (a decrease in LDL levels, and a corresponding increase in HDL levels). The HH ribozymes can also be used diagnostically to study genetic drift and mutations in diseased cells, and to detect CETP mRNA. As the HH ribozymes target specific regions of the CETP gene, they have low non-
                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                         Length 15;
                                                                                                                                                                                                                                                                         13.4%; Score 9.8; DB 1; Length 15 38.5%; Pred. No. 1.2e+03; Live 6; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human flt-1 and KDR hammerhead ribozyme target site #77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Escobedo J;
                                                                                                                                                                                                                                       Sequence 15 BP; 2 A; 3 C; 4 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 9; Page 192; 218pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX75743 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                             915 TGGTCTTTGCCTT 927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                : | | | ::: | |::
2 UGGACUUUGGCUU 14
                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pavco P, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1997-259017/23.
                                                                                                                                                                                                                                                                                        Local Similarity
tes 5; Conserv
                                                                                                                                                                                                               specific activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09715662-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAY-1997.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX75743;
                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1301
                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX75743
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ch gene; antisense oligonucleotide; modulate; gene expression; ss.

Homo sapiens

Synthetic.

EP856579-A1 05-AUG-1998

rb gene antisense oligonucleotide rb-N-111,

(first entry)

15-OCT-1998

AAV49163;

AAV49163 standard; DNA; 15 BP

AAV49163/c

(BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.

97EP-00101531. 97EP-00101531.

31-JAN-1997; 31-JAN-1997; Brysch W;

WPI; 1998-400910/35. Schlingensiepen K,

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0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide specific for the human IL3 receptor. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary diseases, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyper-
vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                              Asthma, airway epithelium, adenosine free, cystic fibrosis, chronic obstructive pulmonary disease, bronchitis, interleukin, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of
                                                                                                           .
0
                                                                            Length 15;
                                                           Score 9.8; DB 1; Length 15.
Pred. No. 1.28+03;
                                             Sequence 15 BP; 3 A; 4 C; 3 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                  Human IL3 receptor antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 5; Page 29; 71pp; English.
                                                                                                                                                                                                                                             BP.
                                                                            13.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96WO-US009306
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                                                                                         46.2%;
                                                                                                                                                                                                                                         AAT76173 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                     916 GGTCTTTGCCTTT 928
                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                      ||:|: || :: || :: | GGUCUAUGCCAUU 15
                                                                                                        6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Metzger WJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1997-051871/05.
                                                                                       Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 reactive airways
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                                                                                                                                                                                                                                                                                                    12-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                 m
                                                                           Query Match
                                                                                                                                                                                                                                                                      AAT76173;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  subject.
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AAV49008-236 represent antisense oligomucleotides directed against the rb gene. Of these, only oligomucleotides AAV49008-52 resulted in effective downregulation of negative growth control by rb, while oligomucleotides AAV49052-236 had little effect. The oligomucleotides exemplify the invention. The specification describes oligomucleotides that contain 8-30 hydrogen bonds to cytosine; do not conclosing that can each form three hydrogen bonds to cytosine; do not consecutive cytosines; do not contain two sequences of three consecutive mucleotides each able to form three H-bonds to three consecutive mucleotides each able to form residues able to form two H-bonds and the ratio between residues able to form two H-bonds each (2R) or three such bonds (3R) is given by ZR/3R = 0.33-0.72. The oligomucleotides are used to modilate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Preparation of antisense oligo:nucleotide(s) which lack long runs of consecutive guanosine or inosine - and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapeutically or to modulate growth of cells in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              expression of genes, particularly the genes for p53, ErB-2, junb, TGF-beta 1 or beta 2 to control proliferation of primary cell cultures (e.g. bone marrow stem, liver or kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The oligonucleotides can also be used to analyse function of proteins (by altering their expression or activity) and therapeutically, e.g. in cases of cancer or (targeting TGF) for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 9.8; DB 1; Length 15;
Pred. No. 1.2e+03;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 10 A; 1 C; 1 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 7; Fig 9c; 286pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         stimulating the immune system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX57567 standard; DNA; 15 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   909 ITTCTTIGGICTT
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    culture.
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RESULT 1303

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Gaps

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Score 9.8; DB 1; Length 15; Pred. No. 1.2e+03; 0; Mismatches 2; Indels

Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other;

13.4%; 84.6%;

Query Match 13.4 Best Local Similarity 84.6 Matches 11; Conservative

TCTTCATTGGTTT 950

938 Н

rcrrccrrccrrr 13

Synthetic.

zon G;

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differentially expresent tag sequences of transcripts that are differentially expressed in colorectal cancer, in pancreatic cancer, or in both. The tag sequences can be used to identify genes by matching the tag to a gen data base member, or by using the tag sequences as probes to isolate unidentified genes from cDNA libraries. The tag sequences can also be used in a method for diagnosing colon or pancreatic cancer in a sample suspected of being neoplastic. The method comprises comparing the level of at least one transcript in a first sample of a tissue to a second sample, where the first sample is a colonic tissue suspected of being neoplastic and the second sample is a normal human colonic tissue. The transcript is identified by a tag selected from AAX30947-31815. The methods of the invention can be used in the diagnosis, prognosis and
                                                                           Use of isolated gene transcripts - useful for developing products for the diagnosis, prognosis and treatment of cancers, particularly colon and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis; acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides used in treatment of, e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13.4%; Score 9.8; DB 1; Length 15
84.6%; Pred. No. 1.2e+03;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human IL-3 receptor antisense oligonucleotide fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15 BP; 3 A; 6 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                               Claim 2; Page 22; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX53970 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98WO-US019419.
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98US-00093972.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   922 TGCCTTTTATCCC 934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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Best Local Similarity 84.6.
There is Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-229400/19.
                       WPI; 1999-070161/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               treatment of cancer
                                                                                                                                                    pancreatic cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9913886-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 1306
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                      Antisense; human; insulin-like growth factor-1 receptor; IGF-1R; expression; inhibition; induction; apoptosis; tumour; liposome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tag sequence; colorectal cancer; pancreatic cancer; colon cancer; diagnosis; prognosis; treatment; ss.
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                                                              Antisense oligo #6 to insulin-like growth factor I receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human insulin-like growth factor-1 receptor gene antisense oligonucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 9.8; DB 1; Length 15; Pred. No. 1.2e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 2 A; 2 C; 3 G; 8 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 16; 23pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98WO-US010277.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13.4%;
84.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                               98WO-US023418
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYJO ) UNIV JOHNS HOPKINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCATTTTTTGG 917
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
      (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (INEX-) INEX PHARM CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-313361/26.
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Les 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-MAY-1997;
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                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                         WO9923259-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                               03-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-NOV-1997;
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      16-JUL-1999
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905

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Query Match

Matches

AAX30949;

ESULT 1305

AX30949

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The specification describes antisense oligonucleotides (AAX52869-X55271)
directed against at least 2 mRNAs selected from target genes, coding and
cono-coding regions of RNAs corresponding to target genes, coding and
codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
end and the juxta-section between coding and non-coding regions and all
segments of RNAs encoding proteins associated with one or more diseases,
conditions or mixtures. The antisense oligonucleotides may be derived
from sequences AAX5527-74. These multiple target oligonucleotides
conditions or mixtures. These multiple target oligonucleotides
conditions. Typical diseases and conditions are those
diseases and conditions. Typical diseases and conditions are those
associated with impaired respiration and inflammation, including lung
diseases, pulmonary vasoconstriction, inflammation, allergic thinitis,
cattle asthma, allergies, asthma, impeded respiration, respiratory
diseases (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
colon cancer, breast cancer, lung cancer, pancreatic cancer,
chopactocellular carcinoma, kidney cancer, melanoma, hepatic metastasized
to the lungs, including breast and prostate cancer
                                                  Disclosure; Page 48; 120pp; English.
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Score 9.8; DB 1; Length 15; Pred. No. 1.2e+03; 0; Mismatches 2; Indels Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other; 13.4%; 84.68; 938 TCTTCATTGGTTT 950 Query Match
Best Local Similarity 84.64
Matches 11; Conservative 1 rcriccriccrir 13 ð

RESULT 1307 AAX14755

AAX14755;

BP.

AAX14755 standard; DNA; 15

(first entry) 24-MAR-1999

DNA detection; triple helix; identification; bacteria; oncogene; virus; ss. Triplex formation;

Triple helix third strand of Hepatitis B virus nucleotides 2405-2419.

Synthetic. Hepatitis B virus.

US5861244-A.

19-JAN-1999.

93US-00173489 22-DEC-1993;

92US-00968436. 29-OCT-1992; (PROF-) PROFILE DIAGNOSTIC SCI INC.

Hepburn AG, Wang C;

WPI; 1999-130384/11.

Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify bacteria.

Disclosure; Col 17-18; 168pp; English

The present sequence represents a polynucleotide that is able to form a triple helix with a double stranded sequence. Cytosine bases in the present can be replaced with 5-methylcytosine for increased triplex stability. The present sequence is used in the assay of the invention, where it can be part of the anchor DNA or reporter DNA sequence. The assay comprises adding a sample containing double-stranded DNA test sequences to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (by detecting genes for ribosomal RNA) in clinical samples, but also detection of

Sequence 15 BP; 0 A; 9 C; 0 G; 6 T; 0 U; 0 Other;

Gaps 0; 13.4%; Score 9.8; DB 1; Length 15; 84.6%; Pred. No. 1.2e+03; tive 0; Mismatches 2; Indels Local Similarity 84.6 Les 11; Conservative Query Match Best Loca Matches

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RESULT 1308 AAA33414

BP. AAA33414 standard; DNA; 15

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Gaps

. 0

AAA33414;

(first entry) 28-JUL-2000

Low adenosine antisense oligonucleotide SEQ ID NO:1103.

antiallergic, antiasthmatic, cytostatic, analgesic, impaired airway, lung disease, ischaemic condition, pulmonary vasoconstriction; asthma, respiratory distress syndrome, pain, cystic fibrosis, emphysema, pulmonary hypertension, chronic obstructive pulmonary disease; COPD; Human, adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

Homo sapiens.

WO200009525-A2.

24-FEB-2000.

99WO-US017712. 03-AUG-1999;

98US-0095212P, 03-AUG-1998;

(UYEC-) UNIV EAST CAROLINA.

Nyce JW;

WPI; 2000-205971/18.

New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or cancers.

Claim 18; Page 403; 1343pp; English.

The present invention describes a new composition comprising an antisense oligonuclectide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic,

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antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung lung leases and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the carcinomas, and each effects. The A-containing ONS break down with the release of deoxyadenosine which activates adenosine receptors causing bronchoconstruction and inflammation. AAA33313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:1 to 186, but the sequences differ from the previously named sequences. SEQ ID NO:1 to 1890 (AAA3233 to AAA3392) are specifically claimed ONS from the present invention. N.B. Sequences given in the disclosure of the present invention. On the match up with their corresponding SEQ ID NO: sequences given in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other;
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Gaps
                                    .
0
13.4%; Score 9.8; DB 1; Length 15; 84.6%; Pred. No. 1.2e+03; ive 0; Mismatches 2; Indels
                                                                        938 TCTTCATTGGTTT 950
                                                                                                         1 refrectreiri 13
                   Local Similarity 84.6
nes 11, Conservative
     Query Match
                                       Matches
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Molecular torch; fluorophore; quencher; hybridisation; fluorescence signal; detection; quantification; target sequence; probe;
                                              Oligonucleotide SEQ ID NO:4, used in molecular torch construction.
           AAZ90250 standard; DNA; 15 BP.
                                   (first entry)
                                   22-MAY-2000
                                                                                      Synthetic.
                       AAZ90250;
ESULT 1309
     AZ90250
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/*tag= a /note= "Conjugated to polyethylene glycol (PEG) plus AAZ90251 to form strand 3" Location/Qualifiers Key modified base modified_base

/*tag= b /note= "Conjugated to quencher DABCYL"

WO200001850-A2

99WO-US015098 01-JUL-1999; 13-JAN-2000.

98US-0091616P 02-JUL-1998;

(GENP-) GEN-PROBE INC.

WPI; 2000-182124/16.

Schroth G;

Becker MM,

New molecular torches for detecting a target nucleic acid in a sample,

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The invention relates to novel molecular torches comprising a target conding domain, a joining region, target closing domain, a fluorophore and a quencher. The molecular torches may be used in a novel method for determining whether a target nucleic acid sequence is present in a sample. In the absence of target nucleic acid sequence is present in a sample. In the absence of target nucleic acid, the target binding domain present facilitates formation of the closed torch. However, in the presence of the target nucleic acid, the target binding domain (an "open torch"). The binding domain is biased towards the target sequence such that the target binding domain forms a more consisted of the target sequence such that the target binding domain forms a more consisted with the target sequence than with the target closing the stable hybrid with the target sequence than with the target closing commain hybrids relative to the binding domain forms a more conditions. This is achieved by the introduction of features which will destablise binding domain/closing domain hybrids relative to the binding domain/target hybrid (e.g., and quencher are in close proximity, meaning that no fluorescence signal conditions. Passer sites or bulges). In the closed torch, the fluorophore and quencher are in close proximity, meaning that no fluorescence signal conditions to the produced. The molecular torches and methods of the invention can be used to detecting the presence of target nucleic acid sequences in cased to detecting the presence of target nucleic acid sequences in amount of target which may be present in a sample. Sequences in an amount of target which may be present in a sample. Sequences Advanced in an antiferation of the strands used to construct molecular torches and methods of the used in an antiferation of the strands used to construct molecular torches late and recomponent parts of the strands used to construct molecular torches the strands used to construct molecular torches the strands used to construct molecular torches a
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0
comprise a target binding domain, a joining region and a target closing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13.4%; Score 9.8; DB 1; Length 15; 84.6%; Pred. No. 1.2e+03; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         exemplification of the present invention
                                                                                                Fig 6A; 58pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            908 TITICITIGGICT 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                       Example 1;
                                           domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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AAA06104 standard; DNA; 15 BP. (first entry) 2 TTTTCCTTGCTCT 14 14-JUN-2000 AAA06104; RESULT 1310 AAA06104/ g ð

CFTR gene analysis oligonucleotide probe SEQ ID NO:114.

CFTR; cystic fibrosis transmembrane conductance regulator; detection; mutation; probe; human; hybridisation; ss. Miyada CG; Sheldon EL, Chee M, Lobban PE, Hubbell EA, She. Lipshutz RJ, Morris MS, Fodor SPA; 93US-00143312. 94US-00284064. 94WO-US012305. 95US-00510521. 95US-00544381. (AFFY-) AFFYMETRIX INC. Homo sapiens. 10-OCT-1995; 26-OCT-1993; 02-AUG-1994; 26-OCT-1994; 02-AUG-1995; US6027880-A. 22-FEB-2000. Huang XC, Cronin MT,

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WPI; 2000-194825/17.
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where the segment includes at least 1 interrogation position

complementary to a nucleotide in the CFTR gene sequence; and (2) second,

third and fourth probe sets, each comprising probes identical to those in

(1) except that the interrogation position is occupied by a different

complementary to a AAA0591 to AAA06240 represent CFTR gene analysis

conclocide. AAA0591 to AAA06240 represent CFTR gene analysis

conjugnoucleotide probes for use in the exemplification of the present

invention. The present invention also describes a method of comparing a

predetermined sequence of nucleotides, comprising; (a) hybridising a

rangel comprising the target nucleotides, comprising the relative

smoothised on a solid support; (b) comparing the relative

specific binding of two corresponding probes from the first and second

probe sets; (c) assigning a nucleotide in the target sequence as the

complement of the interrogation position of the probe having the greater

specific binding; and (a) repeating (b) and (c) by comparing the relative

repeating thirding; and (d) repeating (b) and (c) by comparing the relative

repeating the present of the interrogation position of the probe having the greater

specific binding; and (d) repeating (b) and (c) by comparing the relative

repeating the present of the interrogation of the probe having the greater

specific binding; and (d) repeating (b) and (c) by comparing the relative

repeating the present of the interrogation of the probe having the greater

complement of the interrogation position of the probe the specific binding of a further two corresponding probes from the first and second probe sets until each nucleotide of interest in the target sequence has been assigned. The array is useful for analysis of the CFTR The present invention describes an array of nucleic acid probes immobilised on a solid support, which comprises: (1) a first probe set, comprising probes with a segment of at least 6 nucleotides complementary to the CFTR (cystic fibrosis transmembrane conductance regulator) gene, An array of nucleic acid probes immobilized on a solid support, useful for identifying mutations in the cystic fibrosis transmembrane Disclosure; Col 107; 114pp; English. gene, e.g. detection of mutations conductance regulator.

Sequence 15 BP; 7 A; 3 C; 2 G; 3 T; 0 U; 0 Other;

Gaps .; 0 13.4%; Score 9.8; DB 1; Length 15; 84.6%; Pred. No. 1.2e+03; Live 0; Mismatches 2; Indels 11; Conservative Local Similarity Query Match Best Loca Matches

0;

AAF19536 standard; DNA; 15 BP AAF19536; RESULT 1311 AF19536 HANDER MANAGER MANAGER

14-MAR-2001 (first entry)

Human IL3 receptor polynucleotide fragment #1103.

Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation, surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; immeded respiration; respiratory distress syndrome; pain; cystic fibrosis; allergic thinitis; pulmonary hypertension; emphysema; pain; cystic fibrosis; allergic thinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chancic obstructive pulmonary disease; pulmonary infection; bronchitis; cancer; ss.

Homo sapiens.

WO200062736-A2

26-OCT-2000

24-MAR-2000; 2000WO-US008020.

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chemokine receptors, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system (CNS) and peripheral nervous and non-nervous system creeptors, CNS and peripheral nervous and non-nervous system peptide transmitters, defensins, growth factors, vasoactive peptides and receptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction) and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CR), allergic rhinitis (AR), pulmonary compary transplantation rejection, pulmonary infections, bronchitis, and/or cancer about a and/or cancer about a new process.
                                                                                                                                                                                                                                     Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions.
                                                                                                                                                                                                                                                                                                                                                                                                                 oligonucleotides and compositions (1) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (1) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (1) can be used to down-regulate the expression and or activity of target polypeptides associated with lung/respiratory disorders and malignancies, such as stimulating and activating peptide factors and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and/or cancer. AAF18434 to AAF21543 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                            content antisense
                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes low adenosine (A)
                                                                                                                                                                                                                                                                                                                                             Claim 14; Page 207; 1592pp; English.
  99US-0127958P.
                                                   UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the present invention
                                                                                                                                                                                       WPI; 2000-679539/66.
06-APR-1999;
                                                                                                                                Nyce JW;
                                                      (UYEC-)
                                                                            (NYCE/)
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Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other;

Gaps . 0 13.4%; Score 9.8; DB 1; Length 15; 84.6%; Pred. No. 1.2e+03; tive 0; Mismatches 2; Indels 2; Indels Conservative Local Similarity es 11; Conserv Query Match Matches

; 0

à q

AAF52180 standard; DNA; 15 BP. (first entry) 30-MAR-2001 AAF52180; RESULT 1312 AAF52180/

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFB-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; IGF-I oligonucleotide #3140.

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligomucleotide, (for Insulin-like Growth Factor [197]-1 creceptor, IGF blinding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, coligomucleotide which can be used to design the antisense oligomucleotides of the present invention (see AAP45151 and AAP45153-C oligomucleotides of the present invention (see AAP45151 and AAP45153-C ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratoais, contensias, selroderam, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriashs; IGF binding protein; IGFBP-2; IGFPB); inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborihoea; ruba; keratoshs; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                         Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13.4%; Score 9.8; DB 1; Length 15
84.6%; Pred. No. 1.2e+03;
ive 0; Mismatches 2; Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 1 A; 6 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             neovascular condition of the retina; ss
                                                                                                                                                                                                                                                    Edmondson SR;
                                                                                                                                                                                               (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 8; Page 91; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IGF-I oligonucleotide #2255.
                                                                                                                                                  99US-0140345P
                                                                                               21-JUN-2000; 2000WO-AU000693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF51295 standard; DNA; 15
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Matches 11; Conservative
                                                                                                                                                                                                                                                    Werther GA,
                                                                                                                                                                                                                                                                                                    WPI; 2001-041421/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200078341-A1.
WO200078341-A1
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                                                                                                                                                  21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-MAR-2001
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                                                                                                                                                                                                                                                       Wraight CJ,
                                                  28-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF51295;
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0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contexting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB]-2 or IGFBE3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the effects of psoriasis, oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, neoplasias, scleroderma, warts, benign growths, cancers of the Skin, a hyperneovascular condition such as a meovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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Pred. No. 1.2e+03;
); Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 7 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
       neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                 Werther GA, Edmondson SR;
                                                                                                                                                                                                                                                                                                                 (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 8; Page 81; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               vessels or any other hyperplasia
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84.6%;
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                                                                                                                                                                                                               21-JUN-2000; 2000WO-AU000693,
                                                                                                                                                                                                                                                                    99US-0140345P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    940 TICATIGGITIAA 952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-MAR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13 Trcacretriraa 1
                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-041421/05.
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Best Local Similarity
                                                                                                                  WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   inflammation.
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                                                                                                                                                                                                                                                                    21-JUN-1999;
                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                    Wraight CJ,
                                                                                                                                                                  28-DEC-2000
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RESULT 1313

AF53792

Matches

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Gaps .,

Length 15;

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, clinamation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAP45151 and AAP45153-1 F45161). The method is useful for ameliorating the effects of psoriasis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                     Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborinoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13.4%; Score 9.8; DB 1; Length 15; 84.6%; Pred. No. 1.2e+03; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 5 A; 1 C; 8 G; 1 T; 0 U; 0 Other;
                                                                                                                Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     neovascular condition of the retina; ss
                                                                         (MURD-) MURDOCH CHILDRENS RES INST
                                                                                                                                                                                                                                                                                  Example 8; Page 75; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          vessels or any other hyperplasia
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                                       99US-0140345P.
 21-JUN-2000; 2000WO-AU000693
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                                                                                                              Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14 ATCTCTCCGCTTC
                                                                                                                                                    WPI; 2001-041421/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
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                                                                                                                                                                                                                                            inflammation.
                                   21-JUN-1999;
                                                                                                            Wraight CJ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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Gaps .; 0

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF)-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP]), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide of the present invention (effects of psoriasis, 1945161). The method is useful for ameliorating the effects of psoriasis, nephlasias, selenderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                        Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that infibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis, IGF binding protein, IGFBP-2, IGFBP3, inflammation, psoriasis, pityriasis, growth factor mediated cell proliferation; ichthyosis, serborrhoea, ruba, keratosis, neoplasia, scaleroderma, wart, skin cancer, sclerotic disease, hyperneovascular condition, hyperplasia, kidney disease; necovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 9.8; DB 1; Length 15
Pred. No. 1.2e+03;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 5 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
                                       Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Edmondson SR;
(MURD-) MURDOCH CHILDRENS RES INST
                                                                                                                                                                                                   Example 8; Page 75; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MURD-) MURDOCH CHILDRENS RES INST.
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84.6%;
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                                    Wraight CJ, Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13 Arcrereceerre 1
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                                                                        WPI; 2001-041421/05.
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                                                                                                                                                                 inflammation.
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Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; Keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilasis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis; kidney disease; neobascular condition; hyperplasis; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
                                                                                                                                                                         The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAF4151 and AAF45153-F4561). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, Keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                   Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 7 A; 3 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Edmondson SR;
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                                                                                                                                             Example 8; Page 67; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      vessels or any other hyperplasia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11; Conservative
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WPI; 2001-041421/05.
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200078341-A1.
                                                                                                     inflammation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplama; kidney disease; necotatic of the retina; ss.
                                                                                              The present invention relates to a method for ameliorating the effects of
                                                                                                          skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB]-2 or IGFBB], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide with a sesent invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, selecoderma, warts, benign growths, cancers of the skin, any hyperneovascular condition such as a neovascular condition of the retina brain or skin, growth factor-mediated malignancies, other selerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 15;
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84.6%; Pred. No. 1.2e+03;
iive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 2 A; 7 C; 0 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Werther GA, Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MURD-) MURDOCH CHILDRENS RES INST.
                                                         201pp; English.
                                                                                                                                                                                                                                                                                                                                                                  vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF50098 standard, DNA, 15 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IGF-I oligonucleotide #1058.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             llarity 84.6%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    927 TITAICCTICCTC 939
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                                                               Example 8; Page 91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 Similarity
11; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200078341-A1.
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                     inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-MAR-2001
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         or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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Example 8; Page 67; 201pp; English.

skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [1687].

receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, kelodis, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a brain or well and as a neovascular condition of the retina, The present invention relates to a method for ameliorating the effects of brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 6 A; 3 C; 2 G; 4 T; 0 U; 0 Other;

13.4%; Score 9.8; DB 1; Length 15; 84.6%; Pred. No. 1.2e+03; ive 0; Mismatches 2; Indels 911 TCTTTGGTCTTTG 923 Query Match Best Local Similarity 84.6 Matches 11; Conservative 13 TCAATGGTCTTTG 1

0;

Gaps

0;

AAF49071 standard; DNA; 15 RESULT 1319 AAF49071/c

AAF49071;

BP.

30-MAR-2001 (first entry)

IGF-I oligonucleotide #31

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF1; pitryiasis; IGF binding procein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1

21-JUN-2000; 2000WO-AU000693.

99US-0140345P. 21-JUN-1999;

Werther GA, Edmondson SR; (MURD-) MURDOCH CHILDRENS RES INST. Wraight CJ,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 61; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBp]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense

Example 8; Page 81; 201pp; English.

ö infibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomucleotide which can be used to design the antisense oligomucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic; dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; ptryitasis, IGF binding procein, IGFBP-2; IGFBP3; inflammation, psoriasis, pinatis, growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, keratosis; neoplasia; sceleroderma; wart; skin cancer; sclerotic disease, hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss. Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of Gaps ·. Score 9.8; DB 1; Length 15; Pred. No. 1.2e+03; 0; Mismatches 2; Indels Sequence 15 BP; 8 A; 3 C; 2 G; 2 T; 0 U; 0 Other; Edmondson SR; (MURD-) MURDOCH CHILDRENS RES INST. vessels or any other hyperplasia BP. 21-JUN-2000; 2000WO-AU000693. Query Match 13.4%; Best Local Similarity 84.6%; Matches 11; Conservative 99US-0140345P. IGF-I oligonucleotide #3136. AAF52176 standard; DNA; 15 905 TCATTTTTTGG 917 (first entry) 15 rccrrrrrage 3 Werther GA, WPI; 2001-041421/05. WO200078341-A1. 21-JUN-1999; Homo sapiens. inflammation. 30-MAR-2001 Wraight CJ, AAF52176; RESULT 1320 AAF52176, SSSSSSSSSSSSSg ઠે

hyperneovascular condition such as a neovascular condition of the retina,

brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood

..

Gaps

0

13.4%; Score 9.8; DB 1; Length 15; 84.6%; Pred. No. 1.2e+03; ive 0; Mismatches 2; Indels

11; Conservative

Similarity

Query Match Best Local 9

Best Loc Matches

0 U; 0 Other;

Sequence 15 BP; 6 A; 4 C; 4 G; 1 T;

vessels or any other hyperplasia

88x338x8

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oligonuclectides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serbornhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                      13.4%; Score 9.8; DB 1; Length 15; 84.6%; Pred. No. 1.2e+03; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                              Seguence 15 BP; 6 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                    vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                    0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAF47626 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATTGGTTTAATG 954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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                                                                                                                                                                                                                                                                                                                                                         Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 careptor, IGF binding protein [IGFB]-2 or IGFBP3), which is capable of infibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-0190nucleotides of the present invention (see AAF45151 and AAF45153-0190nucleotides is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborthoea, keloids, keratosis, chthyosis, pityriasis, ruba, pilaris, serborthoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                               Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein; IGFBP-2; IGFBP3; inflammation; psoriasis; plaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Edmondson SR;
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                                                                                                                                                   BP,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-JUN-2000; 2000WO-AU000693
                                                                                                                                                                                                                                                                                  IGF-I oligonucleotide #4476.
                                                                                                                                                     AAF53516 standard; DNA; 15
901 CIGGICATITICI 913
                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Werther GA,
                                        CTGGTCATGTCCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-041421/05.
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                                                                                                                                                                                            AAF53516;
                                           13
                                                                                                          RESULT 1322
                                                                                                                                   AAF5351
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inhibiting or reducing growth factor mediated cell proliferation, oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAF45151 and AAF45153- \$F5161.) The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, unba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

Example 7; Page 51; 201pp; English.

inflammation,

Edmondson SR;

Wraight CJ, Werther GA,

WPI; 2001-041421/05.

(MURD-) MURDOCH CHILDRENS RES INST.

99US-0140345P.

21-JUN-1999;

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Gaps

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Indels

Pred. No. 1.2e+03;); Mismatches 2;

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Conservative

11;

Matches

à g

; 0

Gaps

917

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TCCTTTTATTTGG 905 TCATTTTTGG

84.68;

Local Similarity

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WO200078341-A1
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Sequence 15
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                                                              Query Match
                                                                                                                                                                                                                                                                                                                                          RESULT 1323
AAR49072/C
XX
XX
C
AAR49077
XX
XX
DI
30-MAR-1
XX
XX
C
XX
AAR18011
XW
AAR18011
XW
AAR18011
XW
ACCOOL
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Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scoleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; se.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                              ·.
                                                                   Length 15;
                              Score 9.8; DB 1; Length 15;
Pred. No. 1.2e+03;
BP; 0 A; 7 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                        0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                        BP
                                                             13.4%;
84.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-JUN-2000; 2000WO-AU000693.
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                                                                                                                                                                                                                                                                                                                                                                                  AAF49072 standard; DNA; 15
                                                                                                                                                                            928 TIAICCTCCTCT 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IGF-I oligonucleotide #32
                                                                                                                  11; Conservative
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                                                                                         Local Similarity
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cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriaais; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Edmondson SR;

Werther GA,

Wraight CJ,

WPI; 2001-041421/05.

(MURD-) MURDOCH CHILDRENS RES INST.

99US-0140345P.

21-JUN-1999;

21-JUN-2000; 2000WO-AU000693.

WO200078341-A1.

Ношо

28-DEC-2000.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

IGF-I oligonucleotide #1054.

30-MAR-2001 (first entry)

AAF50094 standard; DNA; 15 BP

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood Example 8; Page 61; 201pp; English. vessels or any other hyperplasia

13.4%; Score 9.8; DB 1; Length 15; Sequence 15 BP; 9 A; 3 C; 2 G; 1 T; 0 U; 0 Other;

Query Match

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1] receptor, IGF binding protein [IGFB]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, colligonucleotide which can be used to design the antisense oligonucleotides of the present invention for eAAF45151 and AAF45153- F45161). The method is useful for ameliorating the effects of psoriasis, includyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic brain or skin, growth factor-mediated malignancies, other sclerotic
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0
Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                             Example 8; Page 67; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          vessels or any other hyperplasia
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Best Local Similarity
Matches 11; Conserv
                                                                                                                                       nflammation.
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à

BP.

AAF50093 standard; DNA; 15

RESULT 1326

AAF50093

IGF-I oligonucleotide #1053.

(first entry)

30-MAR-2001

AAF50093;

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborihoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                             Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborihoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovasular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                        neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wraight CJ, Werther GA, Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                (MURD-) MURDOCH CHILDRENS RES INST.
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                                                                              AAF49073 standard; DNA; 15
                                                                                                                                (first entry)
                                                                                                                                                           IGF-I oligonucleotide #33
13 TGGTCTTTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-041421/05.
                                                                                                                                                                                                                                                                                                                               WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   inflammation.
                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                         21-JUN-1999;
                                                                                                                                30-MAR-2001
                                                                                                                                                                                                                                                                                                                                                      28-DEC-2000
                                                                                                         AAF49073;
                                                      3SULT 1325
                                                                    4F49073
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skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [167]-1 receptor, 167 binding protein [1678]-1 or 1678]-1 inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense of the present invention (see AAF4151 and AAF45153 - 16716). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              present invention relates to a method for ameliorating the effects of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15 BP; 9 A; 3 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 84.6%;
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-11ke Growth Factor IGF9]-1 receptor, IGF binding protein [IGF89]-2 or IGF893), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense 1945161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serbornhoea, keloids, keratosis, heoplasias, soleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15 BP; 9 A; 2 C; 2 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             vessels or any other hyperplasia
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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

Example 8; Page 67; 201pp; English.

inflammation.

Edmondson SR;

Werther GA,

CJ,

Wraight

WPI; 2001-041421/05.

(MURD-) MURDOCH CHILDRENS RES INST.

99US-0140345P.

21-JUN-1999;

21-JUN-2000; 2000WO-AU000693.

WO200078341-A1

28-DEC-2000.

Homo sapiens.

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BP.
                                                                      AAF53791 standard; DNA; 15
915 TGGTCTTTGCCTT 927
                  14 redricirrari 2
                                                  RESULT 1327
                                                              AAF53791
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Gaps

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Indels

13.4%; Score 9.8; DB 1; Length 15; 84.6%; Pred. No. 1.2e+03;

0; Mismatches

Sest Local Similarity 84.6%; Matches 11; Conservative

Query Match

905 TCATTTTTGG 917

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13 rccrrrrrarred 1

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Gaps ..

Length 15;

13.4%; Score 9.8; DB 1; Length 15 84.6%; Pred. No. 1.2e+03; .ive 0; Mismatches 2; Indels

(first entry)

IGF-I oligonucleotide #1056.

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Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF1-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; hyperaeovascular condition; hyperplasia; scleroderma; wart; skin cancer; sclerotic disease; necovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                               Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                          (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                         21-JUN-2000; 2000WO-AU000693
                                                IGF-I oligonucleotide #4751.
                                                                                                                                                                                                                                                                                                                                 Wraight CJ, Werther GA,
                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-041421/05.
                                                                                                                                                                                                          WO200078341-A1.
                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                      inflammation.
                                                                                                                                                                                                                                                                                   21-JUN-1999;
                       30-MAR-2001
                                                                                                                                                                                                                                  28-DEC-2000.
 AAF53791;
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Edmondson SR;

99US-0140345P

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the effects of psoriasis, else of the present invention (see AAP45151 and AAP45153-F45161). The method is useful for ameliorating the effects of psoriasis, neoplasias, scleroderms, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood Sequence 15 BP; 1 A; 7 C; 1 G; 6 T; 0 U; 0 Other; Example 8; Page 91; 201pp; English. vessels or any other hyperplasia

Gaps ; Score 9.8; DB 1; Length 15; Pred. No. 1.2e+03; 0; Mismatches 2; Indels ; 0 13.4%; 84.6%; 927 TITATCCCTCCTC 939 11; Conservative Local Similarity Query Match Matches

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AAF50096 standard; DNA; 15 rrrcrccrcarc 14 N Q

30-MAR-2001 (first entry) AAF50096; AAF50096/c ID AAF5C XX AC AAF5C XX DT 30-M7

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [16F]-1 receptor, 1GF binding protein [1GFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45101. The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, tuba, pilaris, serborrhoea, keloids, keratosis, ichthyosis, pityriasis, tuba, pilaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
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                                 Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborinoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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single nucleotide polymorphism; SNP; osteoclast recruitment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 15;
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84.6%; Pred. No. 1.2e+03;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15 BP; 8 A; 3 C; 2 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human TNFRSF11B gene ASO probe, SEQ ID NO: 107.
                                                                                                                                                                           neovascular condition of the retina; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                  (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 8; Page 67; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           vessels or any other hyperplasia
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                                                                                                                                                                                                                                                                                                                                      21-JUN-2000; 2000WO-AU000693.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11; Conservative
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                                                                                                                                                                                                                                                       WO200078341-A1.
                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                           21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wraight CJ,
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AAF70051/c
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Domain

Ellis JH;

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The present invention relates to polymorphisms of the human interleukin 4 receptor-alpha gene (IL4R-alpha; see AAF57718 for the reference sequence). Polymucleotides comprising polymorphic gene variants are useful for therapeutic purposes. For example, where a patient may benefit from expression of a particular IL4Ralpha protein isoform, an expression vector encoding the isoform may be administered to the patient. It may desirable to decrease or block expression of a particular IL4Ralpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New isolated polynucleotide useful for the identification of therapeutics in allergic diseases is new.
                                                                                                                                                                    The present invention relates to oligonucleotides that downregulate the expression of human Grb2-related with Insert Domain (GRID) gene. GRID is a T-call co-stimulatory daptor protein. The oligonucleotides are useful for modulating the expression of GRID, to treat conditions such as tissue/graft rejection and leukaemia. The oligonucleotides can also be administered in conjunction with other therapies such as radiation, chemocherapy and cyclosporin treatment. The present oligonucleotide was used to illustrate the invention
                                                                       New nucleic acid(s) for regulating the Grb2-related with Insert I (GRID) gene comprises using antisense and enzymatic nucleic acid molecules such as hammerhead ribozymes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                interleukin 4 receptor-alpha; IL4R-alpha;
                                                                                                                                                                                                                                                                                                                                                  13.4%; Score 9.8; DB 1; Length 15; 46.2%; Pred. No. 1.2e+03; ive 5; Mismatches 2; Indels
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           Hamblin PA,
                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 2 A; 6 C; 0 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Duda A, Nandabalan K,
             Mcswiggen JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 15; Page 42; 188pp; English.
                                                                                                                                            Claim 4; Page 93; 108pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human IL4Ralpha gene probe #23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
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allergic disease; probe; ss
             Von Carlowitz I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF69383 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                      930 ATCCCTCCTCTTC 942
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-103078/11.
                                             WPI; 2001-550088/61.
                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
les 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200104270-A1.
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               Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF69383;
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                                                                                                                                                                                                                                                                                                                                                                                        Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence is a probe used to detect polymorphisms in the human osteoclastogenesis inhibitory factor (TNFRSF11B). Polymucleotides comprising one or more of twenty four novel single nucleotide polymorphisms in the TNFRSF11B gene have been identified. TNFRSF11B regulate osteoclast recruitment and function. An understanding of variations in the gene should thus be useful in developing new therapies for metabolic disorders caused by abnormal osteoclast recruitment and function such as osteoporosis, metastatic bone disease, Paget's disease, rheumatoid arthritis and periodontal bone disease
                                                                                                                                                                                                                                                                                                                           Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
osteoclast function; osteoporosis; metastatic bone disease;
Paget's disease; rheumatoid arthritis; periodontal bone disease; ASO;
allele-specific oligonucleotide; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; Grb2-related with Insert Domain; GRID; T-cell;
co-stimulatory adaptor protein; tissue rejection; graft rejection;
leukaemia; cytostatic; ss.
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Pred. No. 1.2e+03;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                              Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15 BP; 7 A; 4 C; 3 G; 1 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                              Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                                                              Claim 15; Page 23; 114pp; English
                                                                                                                                                                                                                                                                                                                                                              disease and rheumatoid arthritis.
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                                                                                                                                                                10-JUL-2000; 2000WO-US018803.
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                                                                                                                                                                                                                                                                                              WPI; 2001-147175/15.
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                                                                                                   WO200104137-A1.
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                                                                     Homo sapiens.
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                                                                                                                                    18-JAN-2001.
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BL48621
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